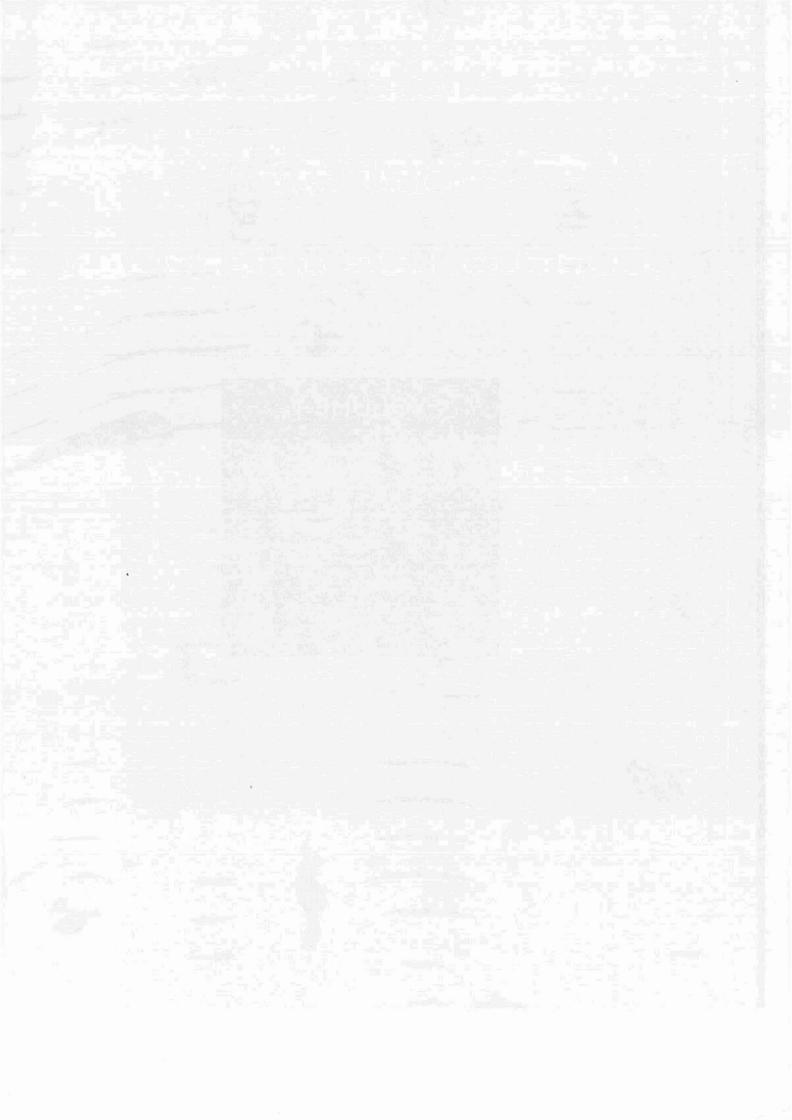
COMPOSITION & HARMO

VOLUME 1



MODAL JAZZ COMPOSITION & HARMONY

VOLUME 1
BY RON MILLER



2.74

WHEN THE MODES OF MUSIC CHANGE, THE WALLS OF THE CITY CRUMBLE. (PLATO)

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TABLE OF CONTENTS

Introduction	6
A Jazz Composer's Regimen	7
How To Use This Book	
Categories of Jazz Compositions	9
CHAPTER I - Jazz Harmonic Systems	11
CHAPTER II - Construction of the Unaltered Diatonic Modes	15
CHAPTER III - Construction of the Unaltered Diatonic Chords	19
CHAPTER IV - Characteristics of the Unaltered Diatonic Modes	27
CHAPTER V - The Modes of the Altered Diatonic No. 1 (Melodic Minor)	31
CHAPTER VI - Non-Modal Chords	37
CHAPTER VII - Chord Connection/Compositional Devices	43
CHAPTER VIII - Upper Structures	49
CHAPTER IX - Completing the Chord Connection Process	57
CHAPTER X - Form	63
CHAPTER XI - Harmonic Contour	65
CHAPTER XII - The Modes and Chords of the Altered Diatonic No. 2	
(Harmonic Minor)	89
CHAPTER XIII - Slash Chord Harmony	95
CHAPTER XIV - Three-Part Upper Structure Chords	111
CHAPTER XV - The Chords of the Altered Diatonic No. 3 (Harmonic Major)	
and Altered Diatonic No. 4 (Melodic Minor #5)	115
Conclusion and Final Comments for Volume 1	124
APPENDIX	
1. Acoustics and Modality	126
2. Construction of the Tetrachords	130
3. Additional Examples	131
4. Ear Training	136
5. Tree of Influential Jazz Composers	120
	138
6. Discography/Bibliography	

INTRODUCTION

The subject of jazz composition has many meanings. Traditionally, a jazz composition was an arrangement for big band that was composed by the arranger. Most of the earlier jazz composition textbooks (and there were few) took that approach. A jazz composition for universal use was not a practiced consideration at that time: most small group performance was based on playing standards or blues, or tunes with new melodies derived from an improvised solo over the original or varied version of the original chords. Even the most forward-looking composers of the time were tied to the song form and tonal harmonic system. Although they produced classic, beautiful compositions, the closed quality of their harmonic vocabulary and symmetric form deprived them of diverse expression. It wasn't until the early sixties, when a group of university educated composers hit the scene, that jazz compositions evolved into venues of individual expression for both the composer and the improvisor. These young composers, aware of the harmonies of Bartok, Stravinsky, Ravel and Rachmaninov, and the use of extended and free-form, introduced a new concept of jazz composition to the jazz world. Representative of this new breed were Wayne Shorter and Herbie Hancock. Of course, there were interim composers who advanced the art of jazz composition and influenced subsequent composers with compositions of great strength and beauty. Horace Silver, a perfect example, influenced many jazz composers - this author included. Although his harmonic vocabulary was based within the tonal system, his use of unusual form and perfect tonal center relationships along with great rhythmic ideas and memorable melodies has earned him the respected position of one of "the masters" (see "Tree of Influential Composers" in appendix). It is the freeing of the composer from the structure (or stricture) of the tonal system and strict form, song form in particular, that has allowed so many composers of inert abilities to "blossom" to artists with individual expressive merit. The goal of Volume I of this book is to show the student the means to develop latent creative abilities by offering the unfettered environment of the chromatic-modal harmonic system and free-asymmetric form. In addition, the freedom of the approach will allow the composer to express himself in any style: Post-1950s jazz, classical, ECM, fusion, pop, etc., that is not tied to any harmonic particulars.

THE JAZZ COMPOSER'S REGIMEN

Jazz is basically a performer's art form. Not unlike the army where in spite of individual specialization everyone is basically an infantryman, everyone in jazz is basically a player. If your talents are stronger in the writing area, be prepared to "pay dues" or get into classical composition or film scoring. Although the basic musical skills required for both players and writers are the same, once those skills are acquired, the process of development changes. The approach to attaining a level of artistic competence for the player requires the environment of the practice room with hours and hours of acquiring motor skills, learning licks and patterns, learning transcribed solos and developing and perfecting a concept of sound production. The composer, in a disimilar fashion, must expand his learning environment to include the world and all it can teach. Once the composer has mastered the basic musical skills, he has to acquire "something to say." Of course, this is true for the player, but the required instrumental skills seem to have precedence at this point. For the composer, whose efforts are less ephemeral, the following regimen is suggested.

- Know theory and nomenclature: composers use written means of communication. This
 category is obvious.
- Evolution of jazz styles: one should be able to write in all jazz styles and knowledge of the elements of all styles will improve one's personal style.
- 3. Study and know the works of the influential jazz composers: Charlie Parker, Duke Ellington, Charles Mingus, Horace Silver, and Wayne Shorter.
- 4. Improvisation: if you can't play it, be able to write it.
- Classical music: study and know the works of the romantic melody writers and modern harmonists - Tchaikovsky, Rachmaninov, Chopin, Prokofiev, Stravinsky, Ravel, Rodrigo, Copland; and the classical influenced ECM composers - Ralph Towner, Eberhard Weber, Kenny Wheeler.
- 6. Study the Humanities: art, literature, drama, particularly the romanticists, and philosophy and religion.
- 7. Study and know world history and world music.
- 8. Travel and diversity: spend a portion of your life away from music with world travel, getting outdoors with hiking, canoeing, rock climbing; get involved with different occupations.
- 9. Volunteer for community service.
- 10. If most of the above is hard to accomplish, at least: read, read and read.

HOW TO USE THIS BOOK

This book is organized in a way that separates the information pertinent to acquiring creative skills, and that of a more esoteric nature: the hows, whys and theoretical foundations, as found in the appendix. This means that the student interested in quickly getting going with composition doesn't need to ferret out the "good" stuff from a jungle of data, while the student interested in the hows and whys can easily access that information. It will be pointed out within the text of each chapter when additional information is available in the appendix. In general, the procedure is to first develop the language of harmony as used in the book, work with exercises to assure mastery of the concept, analyze how the concept is used by accomplished composers and finally, apply the concepts to create a composition. Each chapter has a title page with a list of terms that are important to gaining a complete understanding of the concepts presented in that chapter. The terms, some peculiar to this book, are found in italics and are defined within the text. In addition to understanding the terms and concepts, of extreme importance is the "hearing" of the musical aspects of the concept. Any chord, mode, melody, exercise or example should be played on a keyboard regardless of the student's keyboard skills. Only then should the student, if not a keyboardist, use his own instrument or voice. While playing the examples, the student should be listening intently to train his ears to the particulars of each example. Each day the student should try to find time to listen to a selection from the included discography. The ultimate goal is to have all the recordings listed there available for personal listening from memory alone. An important point to remember is that no one can successfully compose in the way this book advocates without first being able to "hear" the concepts presented. In a nutshell, the student should:

- 1. Learn the concept intellectually.
- 2. Learn to play it on a keyboard.
- 3. Learn to hear it.
- 4. Learn its application in a recorded example.

With each chapter, the subject will be illustrated with an example or examples. Study these, and play them. Next will be suggested exercises that will assure that the concepts are mastered. But more importantly, they are designed to develop creative skills, in fact, most exercises will be the seed idea for a finished composition. The point is to approach the exercises as a potential composition rather than an academic exercise and to do as many as time allows. When all the beginning concepts are mastered, we will begin to analyze how the techniques are used by the master composers on recorded examples. One should have done much listening by this time. Ideally, the book will be used in a classroom situation with an accomplished teacher/composer who can offer informed objective feedback for any student effort. Once the concepts of the book are mastered, this last step is a must for artistic development. When the information is assimilated and mastered (or before), it is hoped that the student will realize that the "freedom" advocated by the methods of this book allows him to do what he got into music to do to begin with: Be creative and have fun!

CATEGORIES OF JAZZ COMPOSITION

The following, like the Tree of Composers (found in the appendix, p. 138), is included to assist in clarifying a direction of study: an attempt to clear some routes through a comprehensive subject and to tie together the compositional styles and influences of the major jazz composers. Jazz, being an art form that allowed individual expression through improvisation, would naturally evolve to allow individuality to be expressed both as composition and improvisation. The categories of jazz compositions that will be covered in both volumes of this book will include the following categories, with volume 1 covering the most complex and comprehensive, as well as that which the rest is a subset: free-form modal (modal complex).

TONAL

A. SONG FORM

Based on the symmetric 32-bar song form typical of tunes from the standard repertoire of the '30s and '40s, this is improvisation oriented composition, many of the tunes being melodies derived from improvisations over standard and dance tunes. Compositions not derived from existing tunes were nonetheless based on their formulae. Their harmonic material rarely strayed from totally diatonic key relationships. Representative composers are Bird (Charlie Parker), Duke Ellington, Billy Strayhorn, Tadd Dameron, and Thelonious Monk.

B. FREE-FORM

No longer strict song form, these can be asymmetric or through-composed. In addition, there is much use of nondiatonic key centering. Representative composers are: Duke Ellington, Charles Mingus, Billy Strayhorn, Benny Golson, and Horace Silver.

C. NEW REHARMONIZATIONS/NEW BOP

Many of the younger composer/improvisors of the eighties, seeking to pay homage to the masters of the past (bebop), returned to the harmonic materials and form of that era (tonal/song form). Based on the bebop concept of writing a new melody over a set of standard changes, this method is made contemporary by altering the harmonic rhythm, by chromatic substitution and by attempts to "modalize" the tonal quality of the original changes. Most of these young "new boppers" are providing this kind of composition: Wynton Marsalis, Rick Margitza, and Jerry Bergonzi are representative.

MODAL

A. MODAL SIMPLE

These are the early modal compositions, where the harmonic content is based on one mode (linear) or a few different modes at different key centers (plateau). Typical are "So What," "Impressions," and "Maiden Voyage." Although not tonal, the form is still fairly symmetric, with most of the compositions being AABA song form. Other than Coltrane and his followers, there doesn't seem to be a "school" of composers with this specialization.

B. MODAL COMPLEX (FREE-FORM)

Having fast asymmetric harmonic rhythm and free-form, this is the most complex and comprehensive harmonic category. This kind of harmony offers the easiest means for creative expression but requires the most creative "effort" of the composer. Wayne Shorter is the main source of inspiration for this category.

PENTATONIC TUNES / BLUES TUNES

This is a composition in which the melodic source material is the focus of its development. That melodic source material is derived from either the unaltered, altered, or add note pentatonic scales and all their modes. The harmonic material can be of any category, but the form is usually derived from that which is found in the world's folk musics.

AVANT-GARDE

A. TONAL/BEBOP

Using tonal melodies and song form as a point of departure, the father of this style is Ornette Coleman, who is a major influence on Carla Bley, Albert Ayler, and Pat Metheny.

B. MODAL

Pushing the simple-modal and pentatonic category to the edge, John Coltrane and his followers at the time - Steve Grossman, David Liebman, Archie Shepp - are the representative composers.

C. FUSION

Utilizing dance rhythms, adding electric instruments, but still maintaining free improvisations as its basis, this category is represented by Ornette Coleman, James 'Blood' Ulmer, Bill Laswell, and others.

D. WORLD/ETHNIC/PROGRAMMATIC

The last category of avant-garde is very diverse in style and offers venue for the composer who has the desire to make a social comment. There are too many in this and the fusion category to list the truly representative. The most famous are Sun Ra and the Art Ensemble of Chicago.

All of the above will be covered in detail in the appropriate chapters of the appropriate volume, but for now it should suffice as a guide to comprehension of the "big picture" and getting an idea of the overall goal of both volumes of this text. Bear in mind that the better jazz composers create works in many of the listed categories.

CHAPTER I

Jazz

Harmonic

Systems

WORDS OR CONCEPTS TO KNOW:

- 1. Style
- 2. Symmetric Division
- 3. Asymmetric Division
 - 4. Tonal
 - 5. Modal
 - 6. Non-modal
 - 7. Chromatic
 - 8. Vertical Modal
 - 9. Plateau Modal
 - 10. Linear Modal
- 11. Harmonic Rhythm
- 12. Harmonic Melody

The harmonic materials emphasized in this book can be applied to any style¹⁾ of composition, if the style is not defined by any harmonic particulars, i.e., post-1950s jazz, pop, ECM, late 19th/20th century classical, etc.

Typical would be the works of Pat Metheny, Wayne Shorter, Ralph Towner, Joe Henderson, and Kenny Wheeler, to name a few. Most of their compositions are similar in their use of non-diatonically related modal material, free-form (non-song form), asymmetric harmonic rhythm, and a diversity of rhythmic style. In addition, many of their compositions reflect a tie to the tradition of jazz with sections of tonal harmony and swing feel. Most of their works are "playable."

MODALITY2) IS DEFINED BY

- 1. The octave as a means of stable limits
- 2. Asymmetric division of the octave into:
- 3. Seven different pitches

Note that the octave divided symmetrically produces non-modal³⁾ scales that have a particular sonoric quality that can be of compositional use.

HARMONIC GROUPS

The groups are defined by the presence or absence of preset rules of structure and organization.

The harmonic content of a composition can be in one group or combinations of the groups. THERE ARE FOUR MAIN GROUPS (three are modal, one is nonmodal).

- 1. TONAL (modal specific) A modal system which has specific means of organization (rules):
 - (a) root movements of a fifth
 - (b) specific modal contour4)
 - (c) diatonic root relationships
 - (d) symmetric harmonic rhythm
 - (e) well defined 'home' key
- 2. MODAL (modal arbitrary, free-form) There are no preset means of organization:
 - (a) root movement, harmonic rhythm, and modal contour determined by the whim of the composer
 - (b) chromatic root relationships
 - (c) usually there is no clear home key
- 3. CHROMATIC (plateau tonal) Same qualities as tonal, except there is no clearly defined home key:
 - (a) there are many different key centers (plateaus)
 - (b) the key centers usually are nondiatonic
 - (c) the harmonic rhythm is usually symmetric
- 4. NON-MODAL (symmetric):
 - (a) unclear resolution, each note has the same harmonic/melodic qualities
 - (b) chords and melodies exist as a sonority, a "sound"
 - (c) example: diminished, whole tone, 12-tone, augmented

- Way in which the composer applies the elements of music harmonically, melodically, etc., which means that harmonic devices that define style must be used in tandem with freeform creativity.
- A quality of the unequal division of the octave in which each scale step has its own harmonic/melodic definition.
- The quality of any scale in which the octave, equally divided, gives each scale step or fragment the same harmonic/melodic definition.
- The dynamic qualities of a group of chords within a section or phrase.

THE SUBGROUPS OF MODAL ARBITRARY

These are the harmonic groups that will be emphasized in this volume and from this point on will generally be referred to as modal harmony.

There are three subgroups of modal harmony: vertical modal, plateau modal, and linear modal.

THE GROUPS ARE DEFINED BY

- (a) harmonic rhythm chord duration, dependent on tempo
- (b) melodic quality of the bass line
- (c) definition of a home key

VERTICAL MODAL

- (a) fast harmonic rhythm (one chord per beat to one chord per bar)
- (b) very active, melodic bass line
- (c) no clearly defined home key
- (d) harmonic melodies are usually chromatic (see p. 61)
- (e) individual chords tend to be heard as a sonority rather than a modality

This harmonic style, being very active, can be overbearing. It is usually used at cadential areas of a composition, but can be found in complete use in some slower tempo tunes.

Examples: "Little One" by Herbie Hancock, "Dance Cadaverous" by Wayne Shorter, "Yellow Bell" by Ralph Towner.

PLATEAU MODAL

- (a) harmonic rhythm slow enough to establish modality per chord
- (b) bass part less active, less melodic
- (c) mostly non-diatonic root relationships
- (d) no clearly defined home key
- (e) harmonic rhythm tends to be symmetric, two to four bars per chord

Examples: "Gazelle" by Joe Henderson, "Afro-Centric" by Joe Henderson, "Loft Dance" by David Liebman, "Maiden Voyage" by Herbie Hancock

LINEAR MODAL (there are two kinds - depending on the harmonic rhythm):

- 1. Slow to no harmonic rhythm:
 - (a) no bass melody, more of a vamp
 - (b) typically only one mode (root) for entire composition
 - (c) an overall key and modality can be identified
 - (d) less symmetric form
- 2. Faster harmonic rhythm:
 - (a) mostly overall diatonic roots, melody, and spelling
 - (b) more melodic bass part
 - (c) clearly defined home key
 - (d) more symmetric form

Examples: Slow - "In a Silent Way" by Joe Zawinul, "Masqualero" by Wayne Shorter, "Sea Journey" by Chick Corea; Fast - "American Hope" by Ron Miller, most pop tunes, Metheny tunes, Brazilian, and new age tunes

SUGGESTED EXERCISES

Listen to the following recordings and try to identify the general harmonic group. If more than one group is used in a single composition, label the group by sections. Try to name the modality of each section.

- 1. The Sorcerer Miles Davis (Columbia CS 9532)
 - (a) "Pee Wee" Tony Williams
 - (b) "Masqualero" Wayne Shorter
- 2. In a Silent Way Miles Davis (Columbia CS 9875)
 - (a) "In a Silent Way" Joe Zawinul
- 3. Power to the People Joe Henderson (Milestone M 90241))
 - (a) "Black Narcissus" Joe Henderson
 - (b) "Power to the People" Joe Henderson
- 4. American Hope Ron Miller (Novus 3058-2N)

Compare the rhythm section style of playing on the above recordings with that of any Charlie Parker recording and compare the harmonic rhythm of the above with any pre-1960s Jazz Messengers recordings. Is there a difference in the harmonic rhythm of compositions found on Messengers recordings after Wayne Shorter joined the band?

Reissued on the 2-LP set "Foresight" (Milestones M 47058)

CHAPTER II

Construction

of the

Unaltered

Diatonic Modes

WORDS OR CONCEPTS TO KNOW:

- 1. Diatonic Method
- 2. Chromatic Method
 - 3. Tetrachords*)
- 4. Connector Tone

METHODS

There are two methods:

1. DIATONIC METHOD

The traditional method: that of establishing a key center and transposing the adjacent notes of the major scale. The modes are diatonically related, with no clear color comparison.

2. CHROMATIC METHOD

Fixed starting note method: this is a nondiatonic method where each mode has the same starting note. The modes are constructed by the combination of tetrachords that clarifies the differences in modality, stability and harmonic/melodic qualities.

The main goal of this section is to establish a harmonic palette for the composer of modal compositions to use in a manner similar to that of the visual artist. The "colors" are to be bright or dark, tense or relaxed, and to have emotional effects as well. With this in mind the chromatic method is the best choice.

The six scales from which the harmonic material in this book will be derived are the following:

- 1. Ionian mode
- 2. Ionian b3 (melodic minor)
- 3. Ionian b6 (harmonic major)
- 4. Ionian b3, b6 (harmonic minor)
- 5. Ionian b3, #5 (melodic minor #5)
- 6. Ionian #2

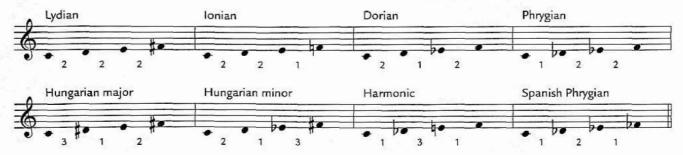
TETRACHORDS¹⁾

There are two groups: diatonic and chromatic

- 1. DIATONIC: Follows an alphabetical sequence, with no enharmonic spellings.
- 2. CHROMATIC: Alphabetic sequence with enharmonic spellings.

DIATONIC	SEMITONES	CHROMATIC	SEMITONES
Lydian	222	Hungarian major	3 1 2
Ionian	2 2 1	Hungarian minor	2 1 3
Dorian	2 1 2	Harmonic	131
Phrygian	1 2 2	Spanish Phrygian	1 2 1





1) A 4-note scale fragment having its own modal quality.

THE DIATONIC MODES (UNALTERED IONIAN)

Using the chromatic or fixed starting note method, the modes are created by combining two tetrachords, each with its own modality, into a resulting merged modality with its own qualities of brightness/darkness, resolution tendencies, and harmonic/melodic definition.

These results should be met:

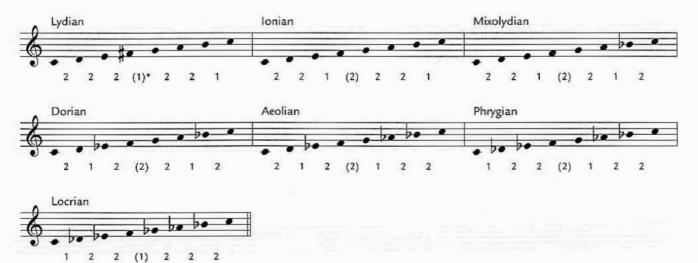
- 1. The sum of the semitones equals 12.
- 2. There are seven different scale steps.
- 3. They are all contained within an octave.

THE FORMULAS

MODE	TETRACHORDS	SEMITONES	CONNECTOR
Lydian	Lydian & Ionian	222 & 221	1
Ionian	Ionian & Ionian	221 & 221	2
Mixolydian	Ionian & Dorian	221 & 212	2
Dorian	Dorian & Dorian	212 & 212	2
Aeolian	Dorian & Phrygian	212 & 122	2
Phrygian	Phrygian & Phrygian	122 & 122	2
Locrian	Phrygian & Lydian	122 & 222	1

Note the shifting of the minor second interval from the right to the left. This is a visual representation of the order of *brightest* to *darkest* of the modes.

Example 2-2: The Unaltered Diatonic Modes



*) Note that in order for the semitones to add up to 12, another interval must be added to the formula, either a semitone or a whole tone. This will be called the connector or connecting tone and is found between the upper and lower tetrachord.

SUGGESTED EXERCISES

):
(a) D Ionian	
(b) F Aeolian	
(c) Eb Locrian	
(d) G Phrygian	
(e) Bb Lydian	
(f) Db Mixolydian	
(g) E Dorian	
2. Try to construct a tetrachord not listed in the text.	
3. Try unusual combinations of the given tetrachords.	
4. Play the tetrachords, learn to identify them by ear.	
5. Do the above for the modes, make note of their emotional quality.	
	=

Construction

of the

Unaltered

Diatonic Chords

WORDS OR CONCEPTS TO KNOW:

- 1. Shorthand Method
- 2. Comprehensive Method
 - 3. Spelling
 - 4. Parent Scale
 - 5. Priority Order
 - 6. Spacing/Voicing
 - 7. Tertiary
 - 8. Cluster
 - 9. Quartal
 - 10. Mixed
 - 11. Balance
 - 12. Support
 - 13. Tessitura
 - 12. Overtone Series
 - 13. Fundamental
 - 14. Upper Structure
 - 15. Grip

METHODS

There are two methods of modal chord construction:

1. COMPREHENSIVE METHOD

All aspects of modal quality and acoustic properties of note groups must be known: spelling, spacing, and balance.

2. SHORTHAND METHOD

Upper structure method: an upper structure with a particular hand shape or *grip* is placed over a root. [Note: The shorthand grip method will be covered in Chapter VIII.]

THE COMPREHENSIVE METHOD

SPELLING/COLOR TONES

To determine the tones (color tones, quality tones) that determine a scales modality, a direct comparison with its *parent scale*¹⁾ must be made.

The notes with different alterations are the notes that give the mode its quality.

There is an order of priority in the list of color tones that define any mode.

THE DIATONIC MODES PRIORITY TABLE

	1	2	3	4	- 5	6
Lydian	#4	7	3	6	9	(5) opt
Ionian (1)	7	4	3	6	9	5
Ionian (2)	7	3	9	6	5	(no 4)
Mixolydian (1)	b7	4	3	6	9	5
Mixolydian (2)	b7	3	9	6	5	(no 4)
Dorian	46	b 3	67	9	5	4
Aeolian	b 6	2	5	Ь3	b7	4
Phrygian	b2	5	4	b7	Ь3	b 6
Locrian	b 5	b 2	67	b 6	Ь3	4

[Note: The order has been adjusted to conform to "common practice"]

SPACING²⁾

has priority order over spelling.

[Note: The primary means of chord construction used in this book is that of stacking of upper structures over roots. The spacing categories refer to the upper structure only.]

THE CATEGORIES OF CHORD SPACING

- 1. TERTIARY The adjacent notes are of a major third or minor third interval.
- CLUSTER The adjacent notes are of a major second or minor second.
- 3. QUARTAL The adjacent notes are of a perfect fourth or #4.
- 4. MIXED The adjacent notes are of a combination of seconds, thirds, and fourths.

The Ionian mode with the same root as the compared mode (see appendix).

The intervalic ratio between the adjacent notes of the upper structure of a chord, there are four categories.

BALANCE/SUPPORT1)

This describes how the vertical spacing affects the chord stability.

[Note: For this kind of harmony, stable chord construction is not always desired; often, an exotic imbalanced construction sounds very appropriate.]

Good balance usually is a result of chord construction, which follows a model of the overtone series in its vertical arrangement. In addition, the quality of the intervals adds to the overall sound – thirds are consonant, seconds have bite, and fourths have tension.

- TERTIARY The most balanced, the one which mimics the overtone series but the most bland and uninteresting.
- 2. CLUSTER The one which is most unlike the overtone series, but has an interesting "bite."
- 3. QUARTAL An example of displaced overtones, it has subtle added tension which gives it a great sound.
- 4. MIXED The best choice, has a good combination of consonance, bite and tension.

SOME GENERAL "RULES"

A. ROOTS

- No less than an octave between the root and the upper structure if the root is lower than G³ (second G below middle C).
- No less than a #4 between the root and the upper structure if the root is above G³.
- No more than an octave between root and upper structure if the root is above C³ (C below middle C).

B. UPPER STRUCTURES (MIXED)

- No more than a fifth between the lowest note of upper structure to its next upper note.
- · No more than a fourth between any of the remaining upper structure notes.

Keep in mind that the upper structure by itself is less sensitive to weak balance, and that unusual combinations are desired in most cases.

A result of the root to upper structure ratio within a certain tessitura.
 Support is effected by the tessitura of the root and its ability to act as a fundamental to the overtone series. (See p. 127)

PROCEDURE FOR CHORD CONSTRUCTION

The priority order table is not set up completely by the dictates of acoustics. There are adjustments made to the table that are more reflective of "common practice." That is, taking preference in the order of notes that emphasize the modal quality of a primary tone or selecting notes that conform to documented use in recordings or printed music. It will be explained in each example when an adjustment is made.

Although all spacings will be represented in the examples, it is restated here that the most interesting are the mixed spacings. Still, one should be familiar with the construction and use of all spacings.

- 1. Select the general tessitura and root of the chord.
- 2. Select the kind of spacing.
- 3. Place the primary color tone somewhere within the selected tessitura.
- 4. Fill in, up or down, the remaining color tones within the specified interval of the selected spacing to the number of notes desired in the chord (four or five plus root is typical).
- Keep in mind the rules of support and balance if good support and balance are desired.One should be able to create a balanced chord on assignment.
- If constructing mixed spacings, try to create balanced chords first, then experiment with exotic (imbalanced) spacings. Some of them sound surprisingly good.
- 7. Erase and adjust if needed. If constructing an assigned spacing (quartal, etc.) you may need to shift the priority table to fulfill the required spacing.
- 8. Doublings are acceptable and even desired in some cases. Recommendations will be made within the comments of each example.

At this time it should be pointed out that there is a problem with the standardization of modal chord symbols. Throughout the remainder of the text, the chord symbols given in the examples are a compilation of suggestions that I have received from the many students I have had from all parts of the world. These suggested symbols work, but are open to criticism.

THE EXAMPLES: THE UNALTERED DIATONIC MODES

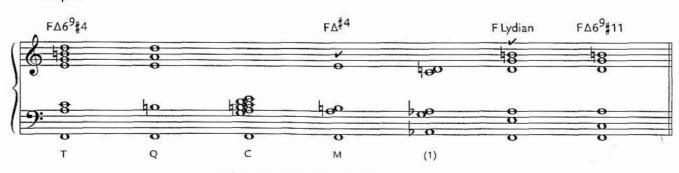
T = Tertiary Q = Quartal C = Cluster M = Mixed

The mixed examples are typical of those found in common practice. Specific examples found in the listed discography will be labeled.

Check marks refer to the preferred examples because of true modal sound or because of "common practice" usage.

1. LYDIAN - Sounds best with the third next to the #4, try to avoid using the fifth, it makes the #4 sound like a #11 (see $F\Delta6/9$ #11).

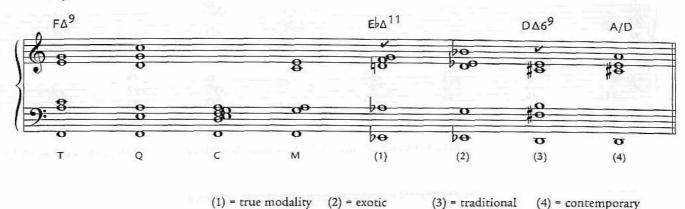
Example 3-1:



(1) found in "Gazelle" by Joe Henderson

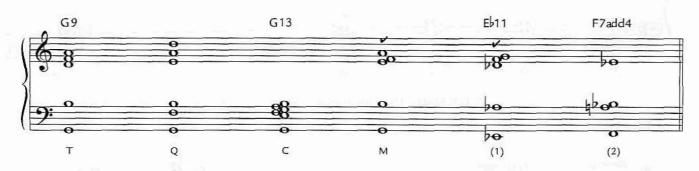
2. IONIAN - There are two forms of Ionian, the common one: $\Delta 6/9$ which is lacking complete Ionian modality, and the Δ^{11} which has the true modal sound.

Example 3-2:



3. MIXOLYDIAN - Like Ionian, has two versions, the one with true modality has both the

Example 3-3:

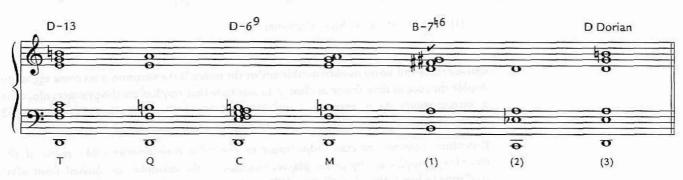


third and the fourth.

(1) = true modality (2) "Monk's Dream"

4. DORIAN - Must have a natural sixth, note that C-9 is not a modal chord.

Example 3-4:

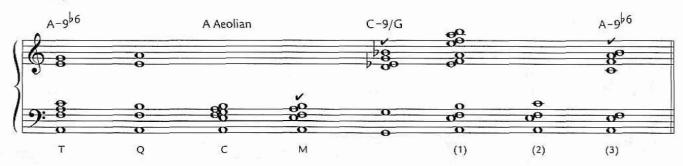


(1) from "Touch" by Eberhard Weber (2) "Alice's Wonderland" by Charles Mingus

(3) "So What" by Miles Davis

5. AEOLIAN - Dark and beautiful, can sound like a first inversion triad.

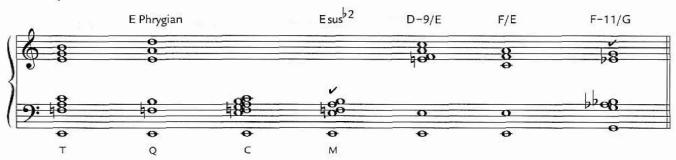
Example 3-5:



(1) a Gil Evans voicing (2) "Sea Journey" by Chick Corea (3) "The Lieb" by Ron Miller

6. PHRYGIAN - Dark and exotic, good "colors" chord.

Example 3-6:



7. LOCRIAN - Use with caution! Can be too dark and tense.

Example 3-7:



(1) from "Haressa" by Steve Grossman

Usually there will be no need to double any of the notes. If the occasion does come up, try to double the root as first choice or choose a color tone that emphasizes the primary color tone as second choice. As an example, doubling the root with Phrygian also emphasizes the $\hat{b}2$ quality of Phrygian, doubling the root with Aeolian emphasizes the natural second.

Regarding 'common practice' adjustment of the color tone priority table, many of the recorded examples are by piano players voicings so the examples are derived from what conforms to hand shape (see Chapter VIII on the grip method). Other adjustments are made to enhance the modality of the chord. An example is the inclusion of the perfect fifth to Aeolian to emphasize the flat six quality while clarifying that the chord is not an Aeolian flat five (Locrian \$2).

SUGGESTED EXERCISES

- 1. Construct 5-note chords (root + four) of the following modes:
 - (a) F Lydian, mixed
 - (b) A Phrygian, cluster
 - (c) Eb Mixolydian, add \$4, quartal
 - (d) Bb Aeolian, mixed (C on top)
 - (e) Bb Dorian, mixed (C on top)
 - (f) E Phrygian, cluster
 - (g) Eb Lydian, quartal
 - (h) A Aeolian, cluster (B on top)
- Construct the following chords as specified (include chord symbols and use your best calligraphy - be aware of neat presentation):
 - (a) G Phrygian, quartal
 - (b) E Dorian, tertiary
 - (c) Eb Ionian, no third, cluster
 - (d) Db Lydian, tertiary

Two mixed each for the following:

- (a) C Mixolydian 44
- (b) F Aeolian
- (c) Bb Lydian
- (d) Db Ionian 44
- 3. (a) Play through all of the above chords, transpose to all keys.
 - (b) Listen carefully as you play. Have a friend play them, try to identify their modality.

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Characteristics

of the

Unaltered

Diatonic Modes

WORDS OR CONCEPTS TO KNOW:

- 1. Order of Brightness to Darkness
 - 2. Momentum
 - 3. Modal Resolution
 - 4. Stability
 - 5. Emotional Generalizations
 - 6. Palette
 - 7. Harmonic Cadence

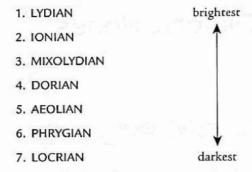
The following characteristics of the unaltered diatonic modes are the seed qualities for all subsequent modes and their chords to be introduced in the book. The later modes/chords have these basic qualities, with subtle enhancements according to their divergence from the source diatonic mode.

The goal of the following descriptions is to establish and list a mode's musical/emotional qualities, which can be referred to for compositional and aesthetical use.

BRIGHTNESS TO DARKNESS

- 1. The shifting of the semitones from right to left increases the amount of darkness.
- 2. The increase of darkness is a realization of the effects of alteration by "flatting."

THE ORDER OF BRIGHT TO DARK



RESOLUTION TENDENCIES

 MOMENTUM - The desire of the root to resolve to the home key, the root of the Ionian mode with the same diatonic spelling.

Examples: C Phrygian wants to go to Ab Ionian; C Lydian wants to go to G Ionian.

The chords can cycle through chords with less momentum until the home is reached.

Example: D Dorian to G Mixolydian to C Ionian

As one can see, this is the foundation for diatonic cadence.

MODAL RESOLUTION - The desire of a modal chord to release its tension by becoming the Ionian mode with the same root.

Examples: C Aeolian to C Ionian, F Mixolydian to F Ionian.

This method of chord comparison is used to create modal contour and will be covered in a later chapter.

STABILITY - The lack of any need of the modal chord to resolve, also could be thought
of as lack of tension. Ionian is the only mode without desire to resolve or to relieve
tension (see appendix).

The order of tension or lack of stability is the same as the darkness order, except that Lydian is less stable than Ionian and wants to resolve to Ionian.

EMOTIONAL GENERALIZATIONS

The modes can and should be used to form an emotional response from the listener. The descriptions are the result of a listener poll upon hearing different modes with different voicings. Being a generalization, the results are accurate in most cases but cannot be totally relied upon. Such inaccuracies come from the diversity of the listener's familiarization with different kinds of music, as well as their life experiences and cultural backgrounds.

THE RESULTS

- 1. Lydian aggressive, urgent, frantic, urbane, busy
- 2. Ionian stable, peaceful, placid, content, hopeful
- 3. Mixolydian transient, searching, suspended, floating
- 4. Dorian brooding, uncertain, thoughtful, pensive
- 5. Aeolian melancholy, sad, somber, darkly romantic
- 6. Phrygian mysterious, exotic, haunting, spacy, psychedelic
- 7. Locrian angry, tense, ugly, mean, enraged

Note that the above qualities can be affected by other musical devices like tempo, tessitura, chord spacing, as well as syncopation, harmonic rhythm, and melody. The order of brightest to darkest should be considered as well.

We now have a simple palette of primary colors with which to create our harmonic scene. We can create a modal landscape by contrasting bright chords with dark ones. We can bring about an emotional response from the listener by our selection of modality and by careful selection of the general key or tessitura of all the chords. In addition, we can enhance the effect by the selection of the appropriate tempo and harmonic rhythm.

All of the above will be covered in later chapters, but next we need to construct modes and their chords that will add secondary "colors" to our palette.

It is important to grasp the concept that the second group of modes is derived from the primary group of simple diatonic modes; that the secondary group is a form of altered-diatonic, and that all the qualities of the original diatonic modes are maintained but enhanced by the quality of the alteration. As an example, one of the modes we will construct is Phrygian, with its sixth naturalized. The sixth of the unaltered diatonic Phrygian is flatted so the new Phrygian natural six has the same qualities of the original but a bit "brighter."

SUGGESTED EXERCISES

B Mixolydian:

- Play all the previously constructed modal chords, try to identify their emotional quality.
 Try to determine if different roots or spacings affect the result.
- Listen to the following recordings, make a comment on your emotional response. Name the overall modality. Note how tempo and key affect the end emotional result.
 - (a) Power to the People Joe Henderson, "Power To The People" (MPS 9024)
 - (b) American Hope Ron Miller, "Elements," Liberal Arts (Novus 3058-2N)
 - (c) Sleeping Giant Herbie Hancock, "Crossings" (BS 2617)
 - (d) The Following Morning Eberhard Weber, "The Following Morning" (ECM 1384)

3.	Learn the acoustic source of the diatonic modes, be prepared to answer immediately.
	Examples: The sale are a main any speeds and radii are a
	C Phrygian: Ab
	F Aeolian:
	Ab Lydian:

CHAPTER V

The Modes

of the

Altered Diatonic No. 1

(Melodic Minor)

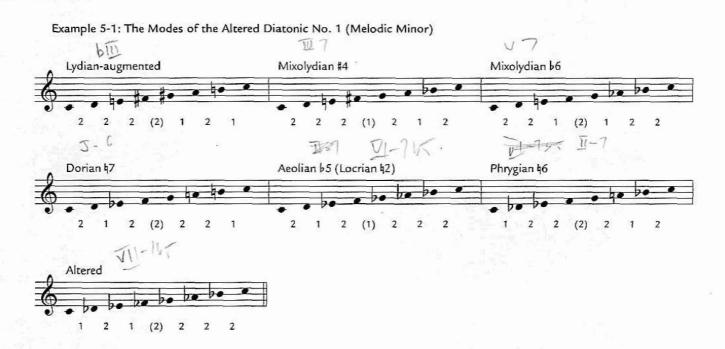
THE MODES OF THE ALTERED DIATONIC NO. 1

Again, the method used for mode construction will be the fixed starting note method: that of combining tetrachords. With this group there is the introduction of the Spanish Phrygian tetrachord. This is the darkest one we use; any futher shifting of the right semitones would produce a wholly chromatic combination.

THE TETRACHORD FORMULAS

MODE	TETRACHORDS	SEMITONES	CONNECTOR
Lydian-augmented	Lydian & Spanish	222 & 121	2
Mixolydian #4	Lydian & Dorian	222 & 212	-1-
Mixolydian b6	Ionian & Phrygian	221 & 122	2
Dorian 47	Dorian & Ionian	212 & 221	2
Aeolian b5	Dorian & Lydian	212 & 222	1
Phrygian 46	Phrygian & Dorian	122 & 212	2
Super-Locrian	Spanish & Lydian	121 & 222	2

Notice the asymmetric organization of the semitones due to the alterations. Although the darkness order is unclear, we will simply follow the order of the unaltered diatonic modes, with the alteration being considered a quality enhancement. Traditionally, we think of the source of this set of modes as being melodic minor (ascending), but in order to refer to the parent scale for order of darkness, emotional characteristic, etc., try to think of the source as altered Ionian – Ionian b3.



CONSTRUCTION OF THE CHORDS

Although we are still using the *comprehensive* method, the chord examples will be of mixed spacings only. There will be examples of other spacings in subsequent chapters and in the appendix.

Comparing the altered diatonic modes with the diatonic modes, we derive the following table of color tones, again, adjusted for common usage and modal definition.

TABLE

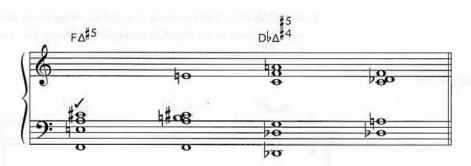
Lydian-augmented	#5	47	3	#4	6	9
Mixolydian #4	#4	b7	3	6	9	5
Mixolydian b6	b 6	b7	3	9	5	4
Dorian 47	47	Ь3	46	9	5	4
Aeolian b5	b 5	b 3	67	66	9	4
Phrygian 46	46	b2	4	67	b 3	5
Super-Locrian	64	Ь7	b6	Ь3	b 5	Ь2

As will be seen, we must use at least two of the tones to get sufficient modal definition.

CHORD EXAMPLES

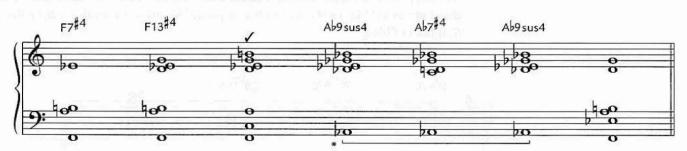
 LYDIAN-AUGMENTED - A brighter form of Lydian, it is quite often found without the #4.

Example 5-2:



 MIXOLYDIAN #4 - Not really the 13#11 chord familiar to all, this chord is usually used in tandem with sus chords. It is a brighter form of Mixolydian and is traditionally called Lydian-dominant.

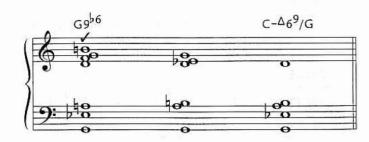
Example 5-3:



^{*)} Use in tamdem with the Mixolydian sus 4 chord.

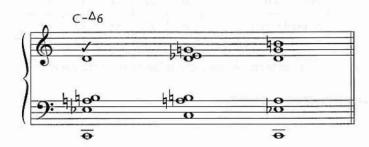
3. MIXOLYDIAN b6 - A darker form of Mixolydian, it has an Aeolian sound and can be confused with Aeolian if the third is not generated in the overtone series by the played instrument (see appendix). This chord is highly recommended for attaining a fresh sound.

Example 5-4:



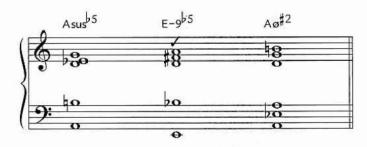
DORIAN \$7 - Usually called minor/major seven, the natural sixth in this mode separates
it from traditional use. Like Mixolydian \$4, it is often used in tandem with sus 4 chords.

Example 5-5:



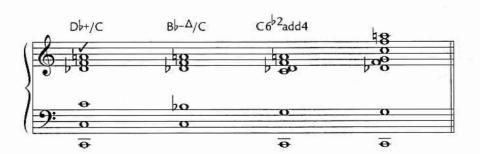
5. AEOLIAN 65 - Also known as Locrian \$2, either name is okay. Although we traditionally use this chord as a ii chord in minor ii-V cadences, the modal use is a "stand alone," nonfunctional use.

Example 5-6:



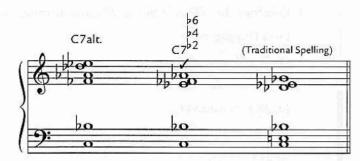
6. PHRYGIAN \$6 - One of the earliest chords used in the new-modal type of compositions, it first appeared on Herbie Hancock's album *Maiden Voyage*, in the tune "Little One." This chord can sound like a 6/4 chord with a suspended \$2 and was used that way by Ravel (Daphne et Chloe).

Example 5-7:



7. SUPER-LOCRIAN - Also known as altered, diminished-whole tone and as the Herb Pomeroy scale. It sounds very dominant and functional but we will use it as a "stand alone" modal chord. If flat fours (i.e., Fb) make you uncomfortable, use the often found incorrect spelling of a natural third.

Example 5-8:



We now have two sets of modal chords in our palette. They can now be merged into an order of bright to dark. As mentioned previously, the altered modes are variations of the diatonic modes. If the alteration increases the number of left-sided semitones, the mode is darker. If the alteration moves the semitones to the right, the mode is brighter. With this in mind, the following is the collated order of the modes we have constructed so far.

THE COLLATED ORDER

EMOTIONAL DESCRIPTION 1. Lydian-augmented very frantic brightest 2. Lydian 3. Ionian 4. Mixolydian #4 tensely yearning 5. Mixolydian 44 6. Mixolydian b6 romantically hopeful 7. Dorian 47 perturbed 8. Dorian b7 9. Aeolian 45 10. Aeolian b5 romantically confused 11. Phrygian 46 open, hopeful 12. Phrygian b6 13. Locrian 44 14. Locrian b4 bluesy, urbane darkest

Having our first group of secondary colors added to the palette, we could, at this point, create some interesting groups of chords. There are quite a few compositions within the new-modal type of composition that keep within this limited palette, but we need more – there are three more sets of altered modal chords to investigate and they will be covered in subsequent chapters. Next, we will look at a group of chords that are used primarily for their quality of sound or sonority. These are chords that have obscured modality but imply a modality with their acoustic properties.

SUGGESTED EXERCISES

	(a) G Phrygian 46	
	(b) Eb Lydian-augmented	
1	(c) G Mixolydian b6	
	(d) Ab Mixolydian 44	
	(e) D altered	
	(f) Bb Dorian 47	
	(g) F Lydian-augmented (slash chord)	
	(h) G Locrian 42	
* a * * * * * * * * * * * * * * * * * *	2. Play them in all keys, doing ear training as usual.	
	3. Use your best calligraphy; use a ruler if needed.	
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	t and the second of the second	
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1. Construct the following chords, all mixed spacings. Include chord symbols.

Non-Modal Chords¹⁾

WORDS OR CONCEPTS TO KNOW:

- 1. Add Note Chords
- 2. Delete Note Chords
 - 3. Suspensions
- 4. Implied Modality

Chords lacking one or more of the modal defining character tones, leaving them without a clearly defined modality.
 (a) sometimes the modality is implied acoustically.
 (b) sometimes the modality is

completed in the melody.

KINDS OF CHORDS

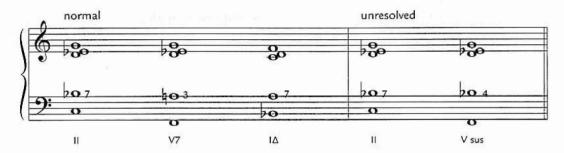
- ADD NOTE CHORDS Derived from unresolved cadences, the unresolved note becoming a suspension.
- DELETE NOTE CHORDS Chords in which a note is deleted to create a chord spacing which has a particular sonority.

ADD NOTE CHORDS

CHORDS DERIVED FROM CADENCES: These are chords that have a sonority that can be described as having an unresolved quality. They are the result of not resolving the normal voice-leading in a cadence. Although they do not have a modal definition, they have an implied modality, which will be pointed out when the chord is discussed.

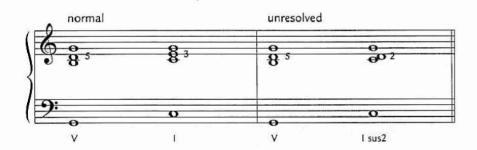
THE MIXOLYDIAN SUS 4 CHORD: Derived from the unresolved II-V cadence, the normal resolution of the seventh to the third is not completed, leaving the seventh to become the fourth of the target chord. Although this chord is treated like a Mixolydian chord, try to consider its quality a product of non-resolution.

Example 6-1:



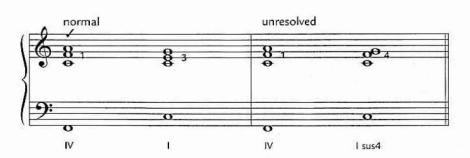
THE SUS 2 CHORD: Derived from the unresolved V-I cadence, this chord is typically a sonority but acoustically can be interpreted as Ionian.

Example 6-2:



THE SUS 4, NO SEVENTH CHORD: This chord is derived from the IV-I cadence, with the normally resolved 1 to 3 suspended and becoming a 4 of the target chord. The chord can be considered Ionian.

Example 6-3:

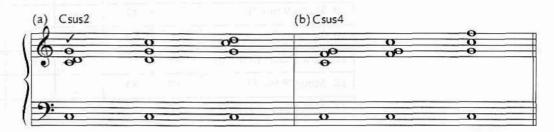


Example 6-4:



MISSING THE THIRD: This chord could be either a minor 11 or a Mixolydian 11. Because a major third is usually generated acoustically, it tends to sound like Mixolydian.

Example 6-5:



Example 6-5a: Sus 2 - Do not include a sixth with this chord, its quality should be stark - root, major second and perfect fifth only.

Example 6-5b: Sus 4, no 7 - Clearly not Mixolydian; include root, perfect fourth and perfect fifth only.

DELETE NOTE CHORDS

These are chords that have notes purposely deleted to create a particular sonority. Because the missing note is usually a primary color tone, its modality, in most cases, is unclear.

The quality tones that are deleted usually are the primary quality tones.

THE MISSING NOTES

MINOR:

Sixths - not clearly Dorian, not clearly Aeolian

Sevenths - not clearly Mixolydian or Dorian 47 (min/maj7)

MAJOR:

Sevenths - not clearly Ionian or Lydian

Fourths - not clearly Ionian, Lydian or sus 4

THE TWO MAIN GROUPS OF THESE KINDS OF CHORDS ARE:

- 1. Chords with a b7, which imply Mixolydian or minor seventh and
- 2. Chords with a major third, major seventh, or no third or seventh, which imply Ionian.

THE TABLE OF CHORD TONES FOR BOTH GROUPS

1. Mixolydian sus 4	b7	_	64	6	9	5
*2. Mixolydian 11	b7	43	\$4	6	9	5
*3. Ionian \u00e44	47	43	ķ 4	6	9	5
4. Minor 11	b 7	b3	\\ \ \ \ 4	7-2	9	5
5. Mixolydian 9 (no 3)	b 7	-	-	-	9	5
6. sus 4 (no 7)	4	-	 44	=	-	5
7. sus 2 (no 3)	-	_	=	1-	2	5
8. Major 9 (no 3)	47	-	1-	-	9	5
9. Major 9 (no 7)	<u></u>	43	17.	145	2	5
10. Minor 9 (no 7)		b3	12.	J	2	5
11. Mixolydian 13 (no 3)	Ь7	7 =	3.07	6	2	-
12. Minor 9 (no 5)	b 7	b3	9 1	25(2	9
13. Mixolydian 9 (no 5)	b7	\\ \ \)	1-0.5	3 65	2	-

The following examples of both groups are typical of those found in common practice.

Example 6-6:

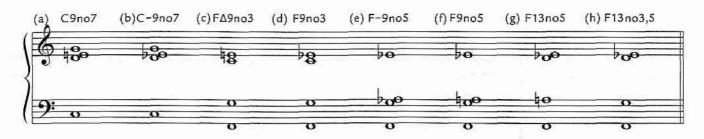


Missing the sixth, the minor 11 is not dominant nor is it Aeolian. It does tend to sound Dorian because of the strength of the sixth (13th) in the overtone series. The examples (a), (b), and (c) are included here to show the similarities of sound and construction. Keep in mind that (a) Mixolydian 11, and (b) Ionian 11 are defined enough to be considered modal chords and are included here purely for comparison. These chords are also to be compared with the previous Mixolydian sus 4 chords. Notice that these four chords have a 4 or 11 in common, with the differences being the inclusion of a major or minor third and the seventh being natural or flatted.

At this point it should be restated that a chord with a truly definitive modality would have all seven notes of the scale included. It could be argued that all chords with less than seven notes are *nonmodal*. For musical reasons we must compromise, as we are doing now – so we will consider the chord examples given in previous (and later) chapters as complete modalities and the chords constructed in this chapter as *nonmodal*.

Definable modal chords included for comparison.

Example 6-7:



Example 6-7a: Compare this with the sus 2; this has a major third and is sweeter, less stark sounding. There is confusion over a suitable chord symbol for this chord. Use root, major second, major third, and perfect fifth only.

Example 6-7b: The minor version of Example 6-7a, missing the seventh; it is unclear but sounds more like minor 7 than min/maj 7.

Example 6-7c: The contemporary voicing of Ionian, a great sound, used much in slash chord harmony (covered later), usually seen as C/F.

Example 6-7d: The Mixolydian version of Example 6-7c, could be C-/F. This inversion was used often by Ravel.

Example 6-7e: The minor second and the perfect fifth give this sonority a great "bite." This is the prototype "new age" chord.

Example 6-7f: The Mixolydian version of Example 6-7e.

Example 6-7g & 6-7h: Implied Mixolydian chords with a good "bite."

There are many more examples in use; to create some of your own, just delete one or two notes from a fully constructed chord, paying attention to the resulting spacing: the combination of seconds, thirds, fourths, and fifths, and then the resulting sound and implied modality.

Before creating your own delete note chords, review the principles of chord spacing in Chapter III. Striving for a particular sonority, use of major or minor thirds will give you a consonant sound, use of fourths will create starkness, and use of major or minor seconds will add bite.

Mixing the intervals will soften the effect of the individual.

Review, in the appendix, some of the principles of acoustics and you will see why some of the missing note chords imply a modality. To experiment: on a grand piano, pound out an $A\Delta$, no 3 chord with the $G\sharp$ on top (E/A), hold the chord and listen intently for the major third to start sounding a few seconds later. Another demonstration would be to play an Eb9sus4 and while the chord is sounding, with a free finger, play a Gb, then try a G natural. Then just play the chord without a third and listen to hear if a third is generated by the overtone series. Try the chord on other roots. Try other chords.

We now have enough chords in our palette to take a break from creating chords and to move on to creating some music. The first step is to organize these chords into a musical whole... so chord connection is the next step, as found on the following pages.

SUGGESTED EXERCISES

	view: F-11	
	G Mixolydian b6	
ĺ	Dsus2 (no 3)	
	ЕЬ11	
e s	F9 (no 3)	
•	Bb Mixolydian #4	
2512421	F4 (no3)	
	Db∆4	
J St	G Locrian 42	
ł	Ab Lydian-augmented	
BOX 5 To	C-9 (no7)	
	C Phrygian 46	
	E9 (no7)	
	Eb13sus4	
	G Phrygian 46	
	F Ionian 44	

CHAPTER VII

Chord Connection

WORDS OR CONCEPTS TO KNOW:

- 1. Common Tone
 - 2. Pedal Point
- 3. Darkness Contour
 - 4. Cadence
- 5. Harmonic Melody
- 6. Common Upper Structure

Most contemporary modal jazz compositions have areas where there is a large number of non-diatonically related chords. Depending on the harmonic rhythm, the areas could be called vertical modal or plateau modal. Linear areas have too few chords to require chord connection, and II-V or tonal areas have predetermined chord connection.

The approach to harmonic organization is divided generally into two categories:

- 1. Harmonic/melodic means and
- 2. Harmonic/rhythmic means

HARMONIC/MELODIC CONNECTION

There are three categories of connection:

- 1. A common focal point
- 2. Contrived contour
- 3. Melodic manipulation

A. COMMON FOCAL POINT

Offers a point of unification for a group of non-diatoniclly related chords. A common aural focal point.

There are four kinds of common focal points:

- 1. Single note upper
- 2. Single note bass (pedal point)
- 3. Common inner structures
- 4. Common upper structures

B. CONTRIVED CONTOUR

An attempt to give an ordered contour of tension and release to a set of modal chords.

- 1. MODAL CONTRAST: Bright to dark, etc.
- 2. MOMENTUM: Desire to resolve to Ionian
- 3. CADENCE: Parody of II-V-I
- 4. MELODIC RESOLUTION of upper/lower neighbor
- 5. CHORD SPACING

C. MELODIC MANIPULATION

Applied to top and/or bass melodies:

- 1. Recognizable patterns (symmetric or asymmetric)
- 2. Organization of contour through the application of melody-writing concepts

PROCEDURES

Keep in mind that these nondiatonic areas are usually found at cadences, vamps or any area where activity or tension is desired; there are few compositions that have many areas of vertical modal harmonic rhythm.

COMMON FOCAL POINT

A. SINGLE PITCH, TOP NOTE

- 1. Select a pitch within the desired tessitura.
- 2. Create a bass melody (see section on melodic manipulation).
 - (a) symmetric pattern
 - (b) diatonic motive and development
- Experiment by playing various chords, voiced with the selected pitch (common tone) on top.
- 4. Tweak: try different chords or bass melodies until your musical taste is satisfied.

Example 7-1:



Finding common tones - What one needs to know to make this process faster or less painful is the acoustic source of any given mode. To review: the acoustic source of any mode is the Ionian or altered Ionian with the same flats or sharps used as the given mode (the same key signature).

This could be a large number since a single pitch is not tied to one source.

EXAMPLE: G above middle C has the following acoustic sources:

It is the fifth of C Ionian

the third of Eb Ionian

the second of F Ionian

the seventh of Ab Ionian

the seventh of Ab Ionian b3

the sixth of Bb Ionian b3

and so on...

In addition, your choice of chord can include any from the seven different modes of each of the acoustic sources.

COMMON TONE	MODE	ACOUSTIC SOURCE
G is the #4th of	Db Lydian	Ab Ionian
G is the 13th of	Bb Mixolydian	Eb Ionian
G is the root of	G Phrygian 46	F Ionian b3 (melodic minor)
G is the 9th of	F Mixolydian	Bb Ionian
and so on		

As is shown in the above example, the relationship of the acoustic sources has an effect on the overall sound of the *group* of chords. In this example we find that all the source roots are diatonically related to Eb Ionian or to Ab Ionian. In addition, many of the chord spellings have

diatonicism in common. This would imply that the above example should sound "good," with an overall consonance and an effect of "belonging" together. Keep in mind that this is not always the goal when connecting a group of chords, that modal contrast and contour have priority when selecting your chords.

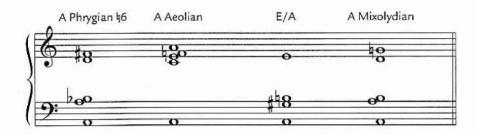
With so many options, the student, at this point, should be quite accomplished with chord spelling: knowing the order of quality tones, as well as knowing the acoustic source of any mode. In addition, the student should have acquired a working familiarization with the sound of the chords through daily ear training. The ability to play the chords in many voicings on a keyboard is a must.

B. SINGLE NOTE BASS PART (PEDAL POINT)

This form of connection is a bit easier to use. It is a traditional technique and familiar to the student. It also is the technique which offers the clearest modal contrast.

- 1. Select a bass note within the desired tessitura.
- 2. Create a melody for the top notes of the chords to follow.
- 3. Experiment with various chords that satisfy your musical tastes. You may want to look at the *contour* part of this chapter to assist in chord selection.
- 4. Tweak, as usual.

Example 7-2:



MELODIC MANIPULATION (symmetric top melody)

Before we go on, it should be obvious that all of the connecting techniques are to be used in tandem: you need to know melodic manipulation to create the top and/or bass melodies and you need to know modal contour to assist in mode selection. Once you have worked with all the techniques, go back and redo the earlier ones.

Next we will look at chord connection with upper structures1).

The use of upper structures is a very important part of this text and will be covered later in a chapter of its own. Since they are used in common connection, we have to take an introductory look at them now. *Inner structures* have the same definition as uppers, except that they aren't used for chord construction. They do provide an exotic method of chord connection and will be of interest to composers of classical and/or film score music.

A group of notes, two to six, perceived as a single sonority or sound. It is this sound that holds a group of chords together as a whole. They are also a key part of the grip method of chord construction to be covered in Chapter VIII.

C. COMMON INNER STRUCTURES

Because these structures are found within a chord, a simple interval of a third, sixth, fourth or fifth is a good choice. Any more than a three-note structure may turn out to be too dense within a group of chords, but try a variety anyway.

- 1. Select a structure; begin with a simple third interval.
- Create a repeating simple melody of two to five notes within a desired tessitura, keeping in mind that this will be the middle portion of a chord.
- 3. The top note of the structure is to follow this melody.
- 4. Next, create a bass melody.
- 5. Play through the example as it is so far, to get an indication of the modality created.
- 6. Add a top melody; use common tone on top if desired.
- 7. Fill in the rest of the chords.
- 8. Tweak.

Example 7-3: (you name the modes)



SUGGESTED EXERCISES

 Connect with common tone (CT) on top: F above mid C, Dalt, EbΔ6/9, Ab13sus4, A-9b6, Eb13sus4, Db Lydian.
<u>.</u>
2. Compose a 6-chord set with CT on top.
3. Compose a 6-chord set, CT in bass part.
4. Compose an 8-chord harmonic set with both CT bass and top.
Use your best calligraphy, use a ruler if needed, use no key signature.
,

Upper Structures

WORDS OR CONCEPTS TO KNOW:

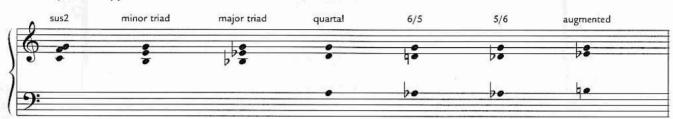
- 1. Upper Structure
 - 2. The Grip
 - 3. Shape
 - 4. 5/6, 6/5
 - 5. Sonority

CHORD CONSTRUCTION

Chord construction with upper structures is known as the *grip* or shorthand method of chord construction. The grip is the actual finger positions of the right hand when playing a chord. There are seven basic grips used to create all the chords found in this text. With this method, one does not need to know the theoretical foundation of chord construction to form chords. Hence, this is a quick, "shorthand" method. This method is derived from keyboard performance and the chords are typical of those you hear on contemporary jazz recordings, particularly by the younger players: Joey Calderazzo, Kenny Kirkland, and Jim Trompeter, to name a few. This kind of chord voicing also is the predominant sound found on fusion, ECM, and new age recordings.

The upper structures are a basic three-note group, but a fourth note can be added for further definition if desired. Keep in mind that the structure is a "shape" and a sonority. The following is an example of the structures and their derivation. [Note: The abreviation US will be used to mean upper structure.]

Example 8-1: Upper Structures





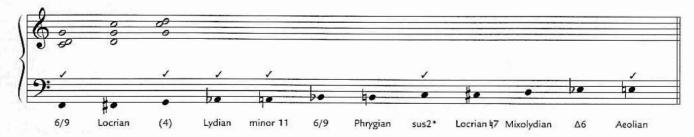
The most used of these structures are the sus 2, quartal (inversion of the sus 2), the major triad, and what I have termed the 5/6 and the 6/5, named from their intervalic formulae. Also, there is a group of Phrygian upper structures which are derived from inversions of the 6/5.

1. THE SUS 2 UPPER STRUCTURE

This structure is the one found in earliest recorded use. There are many chords formed using this structure, as already found in this text. This was a very popular choice of chord construction in fusion music of the '60s and '70s. Made up of a second and a fourth within a fifth, it has a great combination of bite and starkness.

Of the following examples, the chords with the checks are the preferred and most used.

Example 8-2: Modal Chords Created With the sus 2 US



^{*)} Derivation of the structure name.

[Note: Triadic US will be covered in Chapter XIII "Slash Chords"]

The 6/5 and 5/6 upper structures are the ones found most often on contemporary recordings, particularly on ECM, fusion, and pop-jazz recordings. These US require the knowledge of their root acoustic source Ionian mode. This is found by locating the tritone in the US – the upper note being the leading tone (7th degree) of the root Ionian. You can also create some interesting chords by experimenting with the chromatic scale as roots. The 6/5 US is the basic structure found in the chords of harmonic major and will be reintroduced in that chapter.

2. THE 5/6 US

A combination of five semitones (perfect fourth) and six semitones (tritone)

Example 8-3:



3. THE 6/5 US

A combined tritone and perfect fourth (six and five semitones)

Example 8-4:



Note that in the above two examples, the US was not a good choice for the construction of Lydian. Because Lydian implies another acoustic source, one primary color tone is missing.

4. THE PHRYGIAN US

This is actually an inversion of the 6/5; it is so used in its Phrygian inversion that it must be considered as a separate US.

Example 8-5:



5. THE MELODIC MINOR GRIP

Used often in constructing chords from the altered Ionian \$3, melodic minor mode. The grip by itself is a Lydian-augmented chord. It is a tertiary upper structure which contains the very definitive augmented triad. The grip is placed on the minor third of the acoustic source. I.e., Eb for C melodic minor.

Example 8-6:



Dorian 47 Phrygian 46 Lydian \$5 Mixolydian \$4 Mixolydian \$6 Aeolian \$5 altered

Hopefully, the student has recognized many of these constructions as being found in examples of mixed spacings in previous chapters. Using this method of chord construction creates the easiest, as well as the best sounding chord, as is evidenced by how often they are found on the latest recordings.

This subject will be covered more in the chapter on three-part upper structures (XIV) and the chapter on harmonic major and melodic minor \$5 (XV).

CHORD CONNECTION

Chord connection with upper structures follows some of the same principles as given in the section on diatonic chord connection.

- 1. Common focal point
- 2. Modal contour

The principle difference is that where we worked with a single note or a melodic line of single notes, the aural focal point in this case is the structure itself. The sound of the vertical arrangement will be the point of focus.

Because of this, the student should remember that whatever US is selected for use should remain in the selected inversion throughout the phrase of use. Changing the inversion would change the sound of the US and negate the common connection.

Normally, only three upper structures are used for chord connection: the sus 2, triads, and Phrygian. The sus 2 US is easily the most used in jazz and fusion compositions. Triad US use is predominant in pop music and has some use in pop/jazz and new age types of compositions. All forms of US use are found in all the musics, to some degree.

METHODS OF COMMON UPPER STRUCTURE CONNECTION

- 1. Common upper structure, bass melody
- 2. Common roots, upper structure following a given melody
- 3. Upper structure following a given melody, with roots following a given melody
- 4. All of the above with modal contour
- 5. All of the above with final cadence .

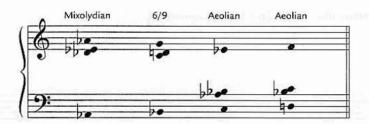
Example 8-7: Common US With Bass Melody



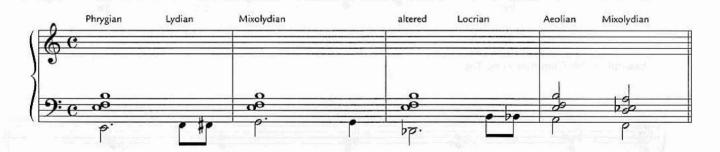
Example 8-8: Common Tone Bass, Top Melody



Example 8-9: Top and Bass Follow Given Melody



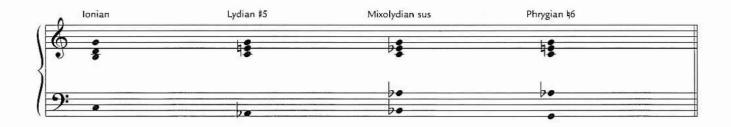
Example 8-10: Common US, Bass Melody, Added Harmonic Rhythm, Cadence



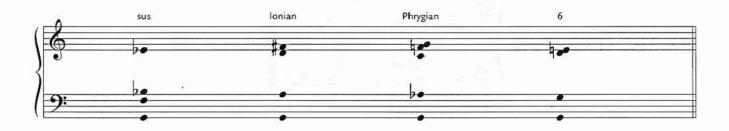
POINTS TO REMEMBER:

- 1. The vertical arrangement of the US should not change (invert); this would change the sonority, losing the common quality which binds the group together.
- 2. The common link of the US is not lost by arpeggiation try it.
- 3. As with common tone connection, knowing the acoustic source of the implied modality will assist in reaching the harmonic goal.

Example 8-11: Common Tone on Top, Bass Symmetric Melody



Example 8-12: Common Bass, Pedal Point



Example 8-13: Common Inner Voice Structure, Common Top

You name the modes



Example 8-14: Common Tone Top



Example 8-15: Pedal Point With Contour Cadence

You name the modes

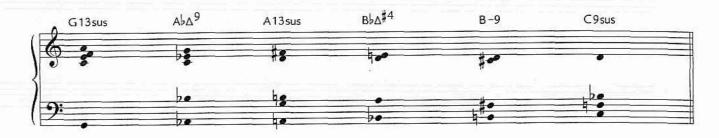


Example 8-16: Common Tone Top, Symmetric Melody Bass

You name the modes



Example 8-17: Melodic Patterns, Top: Ionian Mode; Bass: Chromatic Scale, Contrary Motion



SUGGESTED EXERCISES

Construct the following chords by the *grip* method only; label the grip under the chord (5/6, sus 2 etc.); include chord symbols over the chord.

10. G Mixolydian 66 melodic minor

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7.4			
	1 1 1 1 2		

CHAPTER IX

Completing the

Chord Connection Process

WORDS OR CONCEPTS TO KNOW:

- 1. Clave
- 2. Vamp
- 3. Contrived Contour
 - 4. Parody Cadence

Although playing the previous examples are harmonically satisfying and the chords sound good, they are not examples of music.

In order to make the examples musical we need to apply all of the elements of music to the skeletal harmonic scheme: harmonic rhythm¹⁾, tempo, harmonic contour, with its implications of development, and some form of melodic statement and development.

These will all be covered eventually, but the first step is to give the examples harmonic rhythm.

As mentioned earlier the given examples of common connection are used primarily at cadential areas, which would be found at the ends of sections of a composition or at other areas that require an increase in tension or activity. They are also found in introductory areas where a statement of the premise of the composition is desired.

These areas are usually repeated until the effect is clear. The name for this event is a vamp2).

The first step in our creative effort is to compose a number of these vamps to be used as starting points in the creation of a whole composition.

Recall that the primary emphasis of this book is on jazz composition techniques.

PROCEDURE

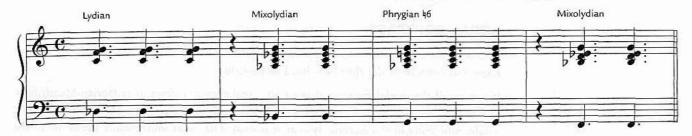
- 1. Select your favorite set of common connected chords.
- 2. Compose or select from the public domain, a two bar rhythmic pattern the Bossa Nova is a good first selection:

Example 9-1: Bossa Clave



- 3. Determine where you want the chords to change on the clave pattern; it could be a change with every clave change or a change every two, or with variations of the clave pattern. In other words, the first chord for the first two clave tics, the second chord for the next clave tic. etc.
- 4. Compose a bass rhythm based on the clave pattern.
- 5. Play and tweak as usual.
- The systematic relationship of the duration of each in a group of chords which shows contour and development.
- 2) Repeated harmonic/rhythmic figure, usually 2 to 4 bars in length which follows a preset rhythmic pattern called a clave. There is a melodic motif in the bass part and a recurring set of harmonically related chords. Vamps are found at cadential areas, turnaround areas and the introductory and closing areas of a composition, or anywhere that rhythmic emphasis is desired.

Example 9-2: Common Tone, Top Note



Example 9-3: Common Tone Bass (Vamp)



Example 9-4: Common US on Top



Example 9-5: Common US on Top, Arpeggiated



Example 9-6: Common Bass, Phrygian US



CONTRIVED CONTOUR

MODAL CONTRAST

This is where we use the order of darkness/brightness of the modes. It is an attempt to give a sense of contour to the chord-to-chord relationship.

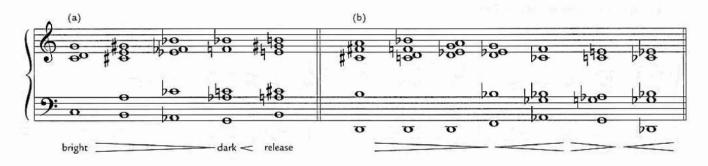
If you recall the modal contour of the traditional diatonic cadence, it is Dorian-Mixolydian-Ionian. That is an order of dark, brighter to brightest. It is also an order of less stable to most stable. And being in the diatonic system, it is a satisfaction of momentum: the desire of the chord roots to cycle to the tonic root.

Although the harmonic vocabulary of this book is mostly contained in a chromatic environment, we can use the diatonic cadence as a model for obtaining harmonic contour.

The options include root movement of a fifth but with a modal relationship other than that found in the diatonic formula; the diatonic modal formula with chromatic root relationships and both chromatic root relationships; and nondiatonic modal selection but with the darkness/brightness following that of the diatonic use.

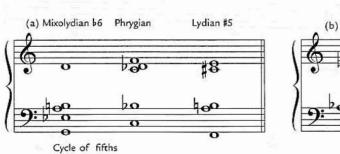
The most used process is to simply contrast the brightness/darkness of the modes to obtain a sense of contour and development, without any reference to the diatonic system.

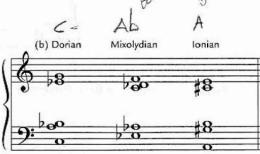
Example 9-7: Modal Contour



- (a) Typical use: increase of tension to a release. Contrary directions of the top and bass melodies enhance the effect. A skip of a third, fifth or tritone to the release chords is recommended. Lastly, notice the change of chord spacing.
- (b) Use of pedal point: overall melodic direction downward. Use of tritone skip to final release chord.

Example 9-8: Parody of Diatonic Cadence (II-V-I)





- (a) Root movement like diatonic cadence, free-form modality.
- (b) Diatonic cadential modal formula, free-form bass melody.

MELODIC MANIPULATION

1. TOP MELODY

Not the actual melody of a composition, but the melodic shape or contour that all the top notes of a group of chords, if spelled out, would create. Of course, we are going to work in the opposite way: spell out our chords to follow a preset melody.

2. BASS MELODY

The actual melodic quality of the bass part if played by itself. Because the nondiatonic modal system we are working in is not tied to root movements of a fifth, we need to work with our bass melody just as if it were the actual melody of a composition.

3. RECOGNIZABLE PATTERNS

Creating a set of chords that follows a melody which is easily recognized by the listener is a quick and easy way to gain musical accessibility. Symmetry just plain "sounds good." But you must use it conservatively, as it can quickly become contriviality.

Another approach is to use an asymmetric source which is familiar to the listener: a mode or tetrachord or any known melody or melodic fragment.

4. MELODIC EFFECTS

Lastly, following the concepts of melody writing (as found in Volume 2), you can create a contour by manipulation of the intervalic relationships and by working with the overall direction of the melody by phrases (the top and bass melodies).

SUGGESTED EXERCISES

- 1. Compose four 2-bar claves.
- 2. Compose a 4-chord vamp, using sus 2 US with a composed bass melody.
- 3. Compose a 4 to 6-chord vamp using compound meter, with your choice of US; have the US follow a given melody and the bass be pedal point.
- Compose an 8-bar harmonic scheme, starting with a 2-bar vamp, with the remaining six bars showing use of common tone, pedal point, and modal contour. Use at least six chords.

Try to be musical; approach this exercise as an artistic assignment rather than an academic one. Create a result you like so much you want to play it for someone.

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Form

WORDS OR CONCEPTS TO KNOW:

- 1. Song Form
- 2. Through Composed
 - 3. Sectional

As mentioned earlier in the text, most of the compositions in the free chromatic modal system are also free in their form. This freedom also means that you are free to use traditional forms if you so desire. Although most of the compositions are free-form, some are still organized by the song form. Particularly if the composition has ties to traditional style, like the new bop kind of composition.

Some of the forms we will see are.

1. SONG FORM

Usually symmetric, with 8 bars per section, following the traditional AABA, an A section, its repeat, a new section then a repeat of the first A section, giving a total of 32 bars.

Variations are usually in the use of varying the bar numbers of the sections.

2. THROUGH COMPOSED

Composed from beginning to end without a concern for development by repetition of sections. The development is by modal/emotional contour.

3. SECTIONAL

Not song form, but does have clear sections, some of which can be repeated. Some examples have sections that although not direct repetitions, are obvious variations of previous sections.

The main point is not to be as concerned about form as you should be about harmonic development.

SUGGESTED EXERCISES

Listen to eight of the compositions listed in the discography, plot their form as AABC, ABCCDA, or whatever the form is.

List the name, source and the form.

Example: "Pee Wee" by Tony Williams from *The Sorcerer*, Miles Davis - through composed, 21 bars

"Masqualero" by Wayne Shorter from *The Sorcerer*, Miles Davis – ABC, A = 8, B = 6, C = 4 total = 18

CHAPTER XI

Harmonic Contour¹⁾

WORDS OR CONCEPTS TO KNOW:

- 1. Harmonic Rhythm
 - 2. Repose
 - 3. Transition
 - 4. Climax
- 5. Cyclic Resolution

The overall organization of a number of modal chords into a unified musical whole, showing development and contour.

METHODS OF ORGANIZATION

- 1. Common tone connection
- 2. Common upper structure
- 3. Harmonic rhythm of the chords
- 4. Melodic rhythm of bass line
- 5. Darkness and momentum cadences (see p. 60)
- 6. Overall harmonic rhythm vertical, plateau, etc.
- 7. Point of climax
- 8. Relationship of first to last chord

CONTOUR BY HARMONIC RHYTHM

- 1. Repose/Transition Gives shape by contrasting fast and slow harmonic rhythm.
- 2. Repose An area within the chord scheme in which there are two or more chords with the same root (pedal point) or only one chord for a bar or more. Like linear modal, these are areas of inactivity and rest.
- 3. Transition Areas with two or more chords with different roots, or chords of short duration, usually changing one bar or less depending on tempo. These are the areas of activity and are usually vertical modal. Tonal harmony is also found in these areas.
- 4. If repose areas are long, a bass part vamp may be needed to add rhythmic interest.
- 5. Transition areas should be devised to increase tension just prior to a repose area.

CADENTIAL AREAS

- 1. Should be placed just prior to repose areas or at the ends of phrases or sections.
- 2. Use darkness/brightness for longer areas.
- 3. Use momentum, II-V, II-V-I parody cadences where strong "finality" is desired.
- 4. Use melodic manipulation to enhance the above or where subtle contour is desired.

POINT OF CLIMAX

It should be mentioned, now, that a main goal of the harmonic contour is to provide the improvisor with a "map" to assist in creative development of the improvisation. The harmonic and rhythmic contour should be designed with that in mind.

A point of climax, a place where the emotional intensity is at its peak, should be plotted. Refer to the following examples for an indication of general area of placement. Ideally, the decision will be made by mature musical judgment. Usually, the climax is found at the end of the most intense transition area just prior to the most relaxed repose area.

CYCLIC FORM

Again, with the improvisor in mind (who most likely will be you!), in order to make it easy to punctuate a chorus of improvisation and allow the setting up of a new chorus, it is recommended that the first chord and the last chord of repeated sections relate in a way that assures an easy access to melodic voice-leading. The clearest means is for the last chord of a section have a dominant function to the target chord (first chord of the repeated section). The last chord should be built on a root that is a fifth away, a tritone, away or of an upper or a lower neighboring tone with a modality that is darker or has less stability than the target chord. For example, if the first chord of a section is F Lydian-augmented, the last chord could be C

Mixolydian sus 4, C Phrygian, E altered, or Gb-11, to name a few possibilities. There are many techniques for doing this and more will be given in later chapters and in following examples.

Creating a harmonic contour is the process of organizing the chords, connected with devices from the preceding chapter into a complete musical whole. Not all the techniques will or should be used. The goal is to create a set of chords that are both musical and "playable." Attaining beauty with simplicity is an attribute that is acquired with maturity.

Before you are to create your own complete set of chords for a composition, we will analyze a number of compositions to see how the composer accomplished the above procedures.

ANALYSIS OF EXISTING COMPOSITIONS

Analysis of the harmonic hows and whys of a composition requires a comprehensive mastery of all the concepts that have been covered so far. In addition, speed of recognition will keep the process from becoming overbearing. Occasionally, the student can become distressed, overcome by an apparent ambiguity created by the availability of so many ways of explaining how the harmonic contour is derived. Try to remember that there is no absolute explanation for any compositional method.

THE PROCEDURE

Start by spelling out all the chords. Try to determine if US technique for chord construction was used. A listening to the recording, if available, would be helpful but not necessary.

Look for a general melodic contour of the top notes of the chords. You may need to invert some chords or change the construction method to give smoother voice-leading.

When satisfied, write down only the top and bass melodies and any pertinent harmonic data: common US, important color tones, etc.

Analyze the bass, then the top melodies.

Make note of melodic devices that may be of importance:

- 1. Motific development: sequence, repetition, etc.
- 2. Symmetric patterns
- 3. Tessitura
- 4. General directional contour
- 5. Active and tense or relaxed

Arrange the chords in a way that the harmonic rhythm can be visualized: long values as whole notes, short as a quarter. The chords do not need to be spelled with the original note values, but if there is an important vamp figure, do write out the note values. If there is a long area with one chord only, label the duration by measures. And lastly, number each chord for reference. Once the melodic analysis is complete, refer to all the methods presented in the previous few chapters and label: common tone, repose/transition, common upper structure, etc.

Hopefully, studying the following examples will clear up any confusion.

The first four examples are compositions similar in harmonic style and emotional content. Their harmonic rhythm comes close to the prototypical vertical modal in areas, if not the whole tune. They can generally be described as having a generally darkly romantic mood, varying according to tempo and key. They are all free-form, chromatic, with no clear key center, although one could pick a pivotal key area from their beginning and ending chords. They all contain a good variety of modes.

The second group of compositions has a more "open" harmonic rhythm, with the first two of

them clearly plateau modal and the third almost within the linear modal category. In addition, the first three of this group are more "traight ahead" player's tunes, each with subtle ties to qualities that are typical of bebop tunes.

The last tune of this group is representative of the European-influenced ECM style of composition, with a few subtle references to American folk harmony. Each composition to be analyzed will have an example of the chords spelled out with harmonic rhythm but not all the rhythmic figures. The example should be sufficient for reference. Also, the chord spellings are not direct transcriptions but quite close in most cases.

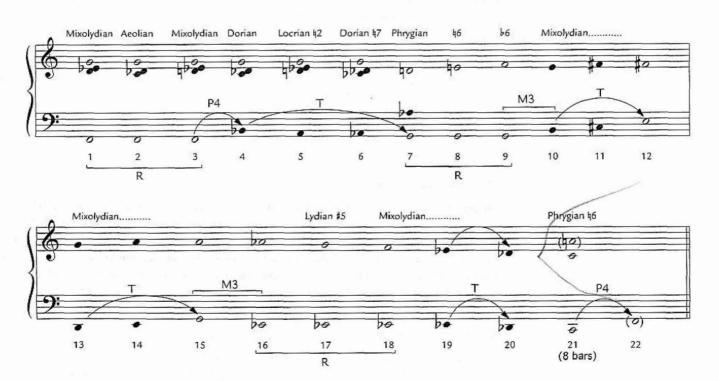
In the actual analysis with comments, using the harmonic synopsis as reference material, one could get very detailed with compositional analysis, with references to all the esoteric theory methods at one's disposal: Shenker analysis, the "Lydian Chromatic Concept," etc. The thrust of the following is to "get to the point" and keep it simple.

In addition, keep in mind that the goal of harmonic contour analysis is to discover how the composers of these great tunes used the methods that have been given in previous chapters of this textbook.

1. RUTH1) - RON MILLER, 1969

This composition shows an influence of the Herbie Hancock tune "Little One," found on the recording *Maiden Voyage*. Its predominant theme is that of gentle romanticism. It is a through-composed waltz, 36 bars with no repeated sections. Its harmonic rhythm, fairly symmetric and fast, can be described as vertical modal.

Example 11-1:



COMMENTS

A. BASS MELODY:

CHORDS:

- 1-3 repose (pedal point), skip of a fourth to...
- 4-6 ...transition area, downward chromatic melody, relaxes to...

· 68 ·

- 7-9 ...repose, slightly higher center, preparation for activity
- 10-12 very active transition area, dominant cycle
- 13-15 sequence of 10-12, increase of tension
- 15-16 inversion of 9-10
- 16-18 very relaxed repose area with low tessitura
- 19-20 melodic figure, occurs always, acts as signpost or "hook," also short transition to...
- 21 long repose area, root has desire to resolve to...
- 22 ...the first chord of the tune

B. TOP MELODY

CHORDS:

- 1-6 common tone connection
- 7-9 upward melody, increased tension
- 10-12 continued upward trend, increased tension, 11-12 common tones
- 13-15 sequence of 10-12
- 14-15 common tone connection
- 16-18 downward flow, relaxing, 16-21 Ab Ionian
- 19-20 recurring melodic idea, signpost or "hook"
- 21 doubling of bass emphasizes sense of finality

C. HARMONIC MATERIAL

CHORDS:

- 1-6 common inner structure
- 1-4 common diatonic source Bb Ionian, Ab Ionian
- 5-6 chords voice-led
- 7-9 darkest area, diatonic source: Eb Ionian
- 10-15 quasi-dominant cycle, very active, setting up the...
- 15 ...point of climax
- 16-18 upper structure tritone pattern Db/Eb, G/Eb, Db/Eb; diatonic source: Ab Ionian
- 19-20 no chord "hook" melody, point of reference
- 21 final chord, exotic yet dominant sound, desire to resolve to first chord

D. GENERAL QUALITIES, EMOTIONAL CONTOUR

- 1. Symmetric repose/transition areas
- 2. Diverse modality, clear emotional contour or "map"
- 3. Three main diatonic areas Bb, Eb and Ab, implied cycle

CHORDS:

- 1-6 gentle, romantic
- 7-9 dark and mysterious
- 10-15 increase activity and tension, almost swinglike
- 16-18 quite romantic
- 19-20 point of reference
- 21 exotic, "colors" area

The above emotional contour provides a clear "map" for the improvisor as well as the listener. Keep this in mind when creating your own set of chords. By mapping out the diatonic acoustic sources of all the chords, one can both gain an insight into the harmonic contour and determine a source of substitute chords. As an example, the first chord, F13sus4 implies F Mixolydian with the source of Bb Ionian, so the first chord could be Eb Lydian, D Phrygian or any of Bb Ionian's modes. The second chord, F Aeolian's source is Ab Ionian, so the substitution of an Eb Mixolydian 13 for that chord does work well, in fact it is used occasionally to get a "Killer Joe" sound.

¹⁾ Benny Golson composition

Example 11-2: "Ruth" by Ron Miller

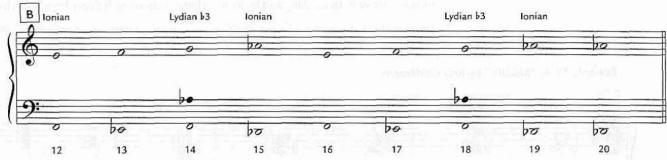


2. MIKELL'S1) - JOEY CALDERAZZO, ca. 1989

Having symmetric harmonic rhythm and overall positive emotional stance, this is a nice "player's tune," the harmonic rhythm is fast enough to imply vertical modal.

Example 11-3:





COMMENTS:

A. BASS MELODY

CHORDS:

- 1 5 repose, with pedal point, the Db is diatonically related to the C pedals, both are related to Bb melodic minor
- 6-7 a short transition area, downward flow, heading for...
- 8 11 ...an ending to the first emotional area
- 12-15 four note motif, new area, new mood
- 16-19 repeat of 12-15
- 20 extension of 19 for cadential purposes

B. TOP MELODY

CHORDS:

- 1 9 diatonic melody derived from primary color tones
- 10-11 common tones
- 12-15 upward contour, positive building of intensity, Spanish tetrachord
- 16-19 repeat of 12-15
- 19- 20 common tone by repetition

C. HARMONIC MATERIAL

CHORDS:

- 1-5 modes are all diatonically related to Bb melodic minor
- 6 7 voice-led with some common inner connection
- 7 8 Bb Mixolydian #4 acts as tritone substitute resolution to A minor
- 8 9 parallel movement
- 10 resolution to the relative major

- 11 the dominant V chord of the next section
- 12-13 parallel chords, implied plateau modal
- 14 parent source is harmonic major (see Chapter XV)
- 16-19 repeat of 12-15
- 19 closest there is to a point of climax, rather subtle
- 20 cadence through repose, as last chord, resolves to first chord as upper neighbor and diatonic relation

D. GENERAL QUALITIES

- There are similarities between this tune, "Ruth," "Pee Wee," and "Hello Goodbye": root relationships, emotional effect, and similar key centers. Looking them over, try to determine the common source of inspiration.
- 2. The emotional mapping is simple with two areas: the first, chords 1-11 a little dark and subdued because of its general modality and because of its slow harmonic rhythm with repose by pedal point and because of its having little bass melodic contour. Chords 12-28 are more active both modally and by bass melodic contour with faster harmonic rhythm.
- Another through-composed tune, the form is symmetric with two sections: A- 14 bars and B- 10 bars.

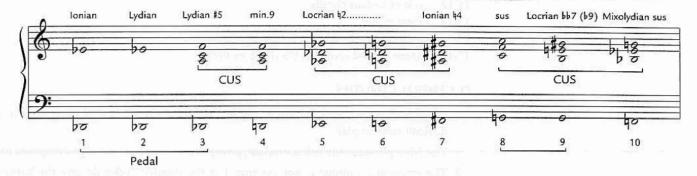
Example 11-4: "Mikell's" by Joey Calderazzo

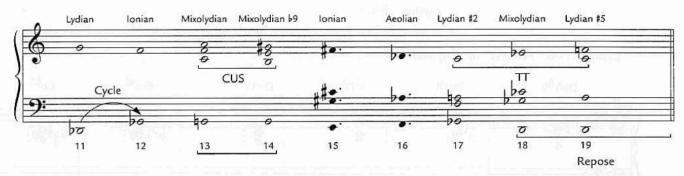


3. PEE WEE1) - TONY WILLIAMS

This gentle waltz has symmetric harmonic rhythm and has a few areas of quasi-functional chord movement, which is typical of a composition that is transitional from tonal to modal chromatic.

Example 11-5:





COMMENTS

A. BASS MELODY

CHORDS:

- 1-3 repose area (pedal point)
- 4-7 chromatic, fairly slow transition area, increase of tension
- 8-10 repose area
- 11-12 transition with cycle of fifths
- 13-14 repose area
- 15-17 transition with signpost "hook," occurs at all times, including improvisation (see "Ruth" and "Teru")
- 18-19 last repose area
- 19 resolves to first chord by modal shift with pedal point

B. TOP MELODY

CHORDS:

- 1-2 common tone connection
- 3-4 common tone
- 5-7 chromatic melody upward
- 8-10 inversion of 5-7
- 11-13 sequence of 8-10
- 13-14 common tone
- 15-17 strong leap downward, contrary motion to bass melody, a "hook" motif, as found in many compositions
- The Sorcerer Miles Davis Columbia CS 9532
- 17-19 form of inversion of 15-17, a return to starting place

C. HARMONIC MATERIAL

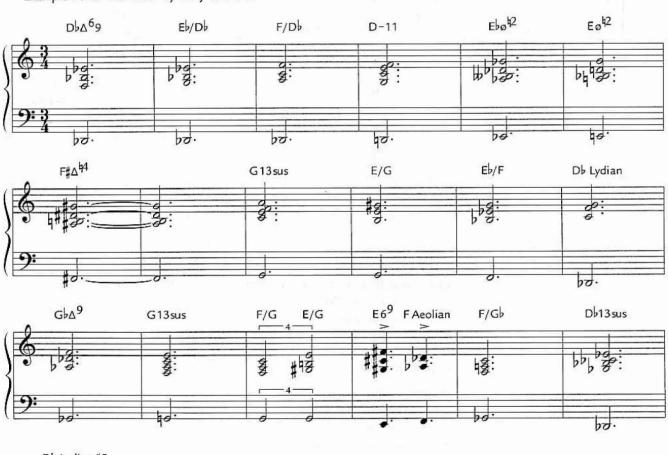
CHORDS:

- 1-3 increase in tension
- 3-4 common US, bright to darker
- 5-7 common US
- 8-10 common US, cryptic cadence, (see Chapter XIII) quasi II-V (D-7 to G7b9 to C-7)
- 11-12 cycle of Lydian chords
- 13-14 repeat of 8-9
- 15-16 common inner structure, point of climax
- 17-19 tritone related common US (F/Gb to B/Db)

D. GENERAL QUALITIES

- In spite of its symmetric harmonic rhythm and its ties to functional harmony, this is a difficult tune to play.
- 2. The 3-bar phrase at the end is unusual, giving the tune a 21-bar through-composed form.
- The emotional contour is not extreme, but the inserted cycles do give the harmonic rhythm a boost.
- 4. It seems to have been composed purely by intuition, without much pre-planning.

Example 11-6: "Pee Wee" by Tony Williams



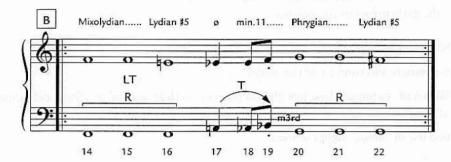


4. TERU1) - WAYNE SHORTER

This is a very slow ballad, based on the traditional song form; it has an AABA form but the bridge has only seven bars.

Example 11-7:





COMMENTS

A. BASS MELODY

CHORDS:

- a full bar of Gb Lydian at the slow tempo shows repose
- 2-3 an important "hook" or signpost of the composition
- 4-9 an active transition area with an active bass melody
- 10-11 downward, relaxation toward the cadential repose area
- 12-13 pedal point bass repose area, cycles to first chord by lower neighbor tone (leading-tone effect)
- 14-16 pedal point repose area
- 17-19 increase of tension with upward and active transition area, the staccato on chord 19 effectively sets up the release of the tension at bar 20; the downward minor third skip to chord 20 enhances the result
- 20-21 the final repose cadence, the last chord cycles to the first by upper neighbor tone

B. TOP MELODY

CHORDS:

- 1 primary color tone
- 2-3 contrary motion to bass is effective in increasing tension
- 4-9 definition tones
- 10-11 common tone connection
- 12-13 common tone connection
- 14-16 downward resolution of melody clarifies modal cadence
- 17-9 color tones
- 20-22 sequence of 14-16

C. HARMONIC MATERIAL

CHORDS

- 1 bright but tense
- 2-3 a form of II-V cadence, derived from a voice-leading method
- 4-9 a good example of modal contour and II-V cadential parody, the Phrygian to Mixolydian (4-5) is a diatonically related cadence, with the acoustic source being C Ionian. The Phrygian could be thought of as D Dorian over E, so it is a typical II-V with substituted root for the II chord. The Mixolydian to Ionian (5-6) follows the normal modal contour of a diatonic cadence but with free-form roots
- 10-12 parallel Mixolydian chords moving a minor third is typical
- 11-12 a dominant cycle of Mixolydian chords
- 12-13 another parody cadence
- 14-16 modal contour, parody cadence V-I
- 17-19 parallel chords, closest we have to a climax at bar 19, effective for setting up the following dark area
- 20-22 like 14-16 but more extreme in modal resolution
- 20-21 the darkest part of composition

D. GENERAL QUALITIES

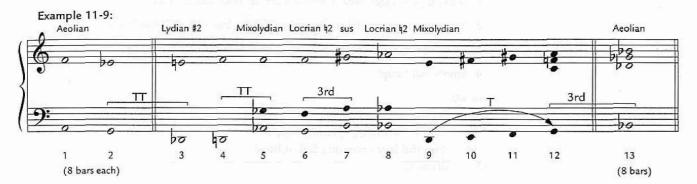
- 1. Good variety and contrast of the modes.
- 2. With a quite chromatic bass melody and short or no clear areas of emotional definition, this is vertical modal.
- 3. Good use of "hook," signpost areas.

Example 11-8: "Teru" by Wayne Shorter



5. THE LIEB1) - RON MILLER, 1984

This composition, written for saxophonist/composer David Liebman, is representative of the plateau modal category with a vertical modal bridge. The emphasized modality is Aeolian, with a medium tempo; the overall mood is dark romanticism. This tune could be described as American ECM.



COMMENTS

This being a plateau modal composition, the only significant harmonic movement is in the bridge, which is vertical modal.

A. BASS MELODY

CHORD:

- 1-2 two plateaus of Aeolian, a whole tone apart, the downward change creates more darkness, a tritone skip down to next chord creates tension
- 4-5 tritone skip, inversion of 2-3
- 3-8 a general upward trend, preparing to set up a point of climax
- 7-8 sequence of 5-6
- 9-12 a definite transition area, the movement is faster, upward, following a Dorian tetrachord
- 12-13 the normal resolution here is for the melody to resolve up a semitone, the skip is unexpected

B. TOP MELODY

CHORD:

- 1-2 primary color tones
- 3-4 same
- 4-6 common tone
- 7-8 common tone
- 9-12 upward movement, Ionian tetachord, setting up climax
- 13 highest point in the harmonic melody, dramatic

C. HARMONIC MATERIAL

CHORD:

- 1-2 plateau Aeolian, dark, soft
- 3-4 strong contrast, bright, tense, hard
- 4-6 Db/D to Gb/Ab, cryptical cadence Db to Gb V-I US, chords 5 and 6, common US except for one note of voice-leading: Gb to F
- 7-8 sequence of 5-6, up a minor third, overall positive resolution
- 9-12 fast moving chords, all sus, positive, sets up climax
- 12 point of climax

¹⁾ The Music of Ron Miller CCP/ Belwin SB266

12-13 a kind of cryptic cadence (see chapter on slash chords), with a lower neighbor resolution with the upper structure and a minor third up in the bass, a kind of sequence of 5-6

D. GENERAL QUALITIES

- 1. Dark, ECMish feel, New York on a drizzle filled autumn day
- 2. As is all plateau modal tunes, rather simple, but nice to "blow" over
- 3. Fairly symmetric in form, 8, 8, 16, 8, sectional through-composed
- 4. Emotional "map"

CHORD:

- 1-2 darkly "hip" to darker
- 3-5 slightly "wrinkled," getting hopeful
- 5-12 doubtful love becoming full of hope
- 13 dramatic
- 5. The modulation, change of key from the opening A Aeolian to the ending Bb Aeolian, contributes to the overall dramatic effect of this tune and was a strong factor in the plan of attack when composing it.

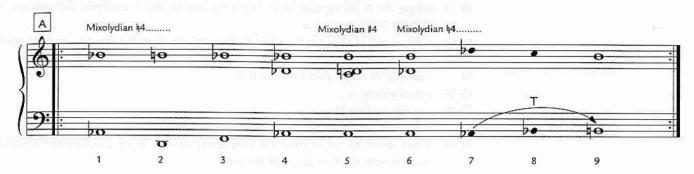
Example 11-10: "The Lieb" by Ron Miller

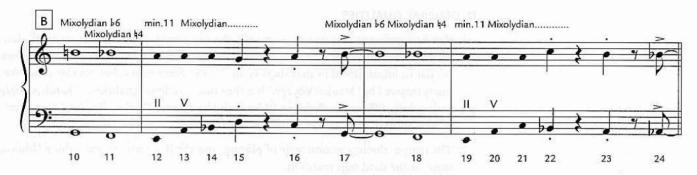


6. JC ON THE LAND - RON MILLER

This is a plateau modal composition written for saxophonist/author/jazz educator Jerry Coker. Its overall modal quality being Mixolydian, it is one of the many plateau modal compositions that can be compared to Herbie Hancock's "Maiden Voyage." This is only in the overall emotional quality associated with the Mixolydian mode as the following will show.

Example 11-11:





COMMENTS

A. BASS MELODY

CHORDS:

- 1-4 outline of a diminished triad, or a skip down a tritone, cycling back to the starting note by minor thirds
- 4-6 common tone bass
- 7-9 passing tones to the cadential B root, notice that the entire bass melody of the A section could be derived from the diminished scale
- 10-12 relaxed, downward contour, setting up an active area
- 12-14 a II-V cycle,12-13 to a substitute I chord (parody cadence)
- 15-16 is a signpost "hook"
- referring to 13-14, the resolution to the C is dramatic and sets up the turnaround to resolve to Ab
- 22-24 derived from 15-17, this is set up to resolve to the first chord of the tune

B. TOP MELODY

CHORDS:

- 1-6 derived from color tones or voice-leading
- 7-9 contrary motion to bass melody, enhances cadential quality
- 10-12 chromatic down, 10-11 a form of voice-leading
- 12-14 voice-leading a II-V to parody V-I
- 15-17 contrary motion
- 17-20 same as 10-13
- 22-24 setting up first chord of the composition

C. HARMONIC MATERIAL

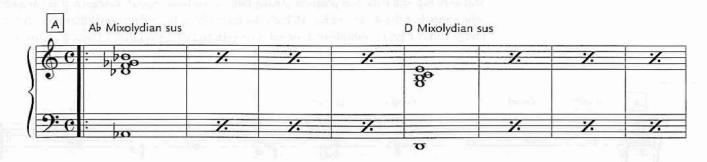
CHORDS:

- 1-4 parallel Mixolydian chords, 4 bars each, this is plateau modal
- 4-6 the common use of Mixolydian \$4 to Mixolydian \$4 to Mixolydian \$4, it creates a positive emotional effect due to the brightening of the fourth
- 7-9 a minor third up is a very positive and typical resolution of Mixolydian sus chords (remember "Maiden Voyage"?)
- 10-11 taking the G Mixolydian b6 to be a C-Δ over G, this is a cryptic II-V cadence, the cadence being C- to Fsus
- 12-13 a diatonic II-V, this part is in fact a swing style section showing a tie to a traditional hard bop aesthetic
- 14 a substitute target chord for the II-V
- 15-16 a turnaround to...
- 17-20 ...a repeat of 10-13
- 21 a higher tonal center of chord 14, creates drama
- 22-24 a turn down to top of tune, the note durations are set up to create tension which resolves with the first chord of the tune

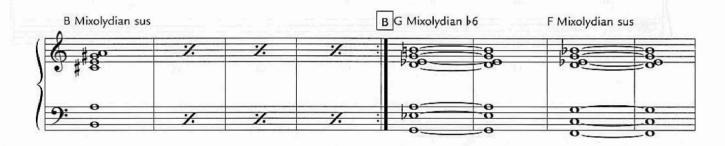
D. GENERAL QUALITIES

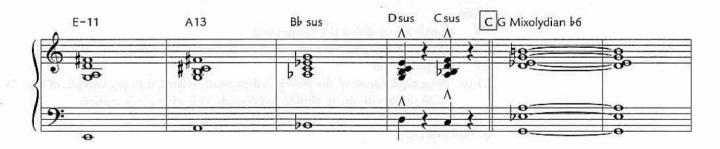
- 1. Having symmetric plateaus of essentially the same mode, this is an example of plateau modal, same mode. In addition, because each plateau has the same mode, the tune is similar to linear modal in that there is one overall emotional effect. So this tune, like so many inspired by "Maiden Voyage," has the same emotional qualities as "Maiden Voyage" with subtle differences. Refer to "Why Wait" by Stanley Clarke, "Twelve More Bars" by Wayne Shorter, and "Follow Your Heart" by John McLaughlin.
- The tempo, rhythm section style of playing, and the II-V sections make this a "blowing" tune, in the hard bop tradition.

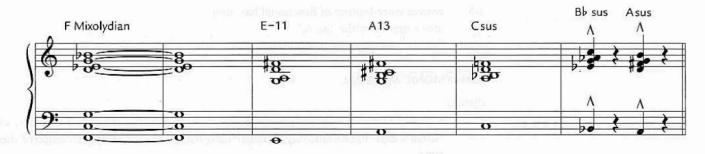
Example 11-12: "JC On The Land" by Ron Miller







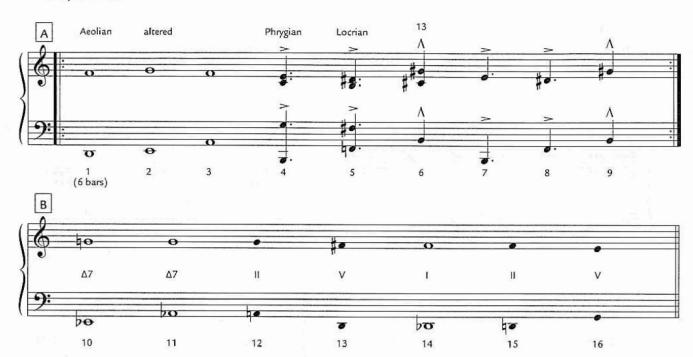




7. PUMPKIN1) - ANDREW HILL

This very hip and dark composition almost falls in the linear modal category. It is basically song form, but the A section has 10 bars. Additionally, it has a functional harmony (II-V-I) bridge and is a great example of a modal tune with ties to the traditional bebop aesthetic.

Example 11-13:



COMMENTS

A. BASS MELODY

CHORD:

- 1-3 simply a root with a II-V turnaround
- 4-6 a tritone figure, the signpost "hook" of this tune
- 7-9 a repeat of 4-6
- 10-16 being tonal harmony, the melody is diatonically related, defining the cycle of keys: Eb to Ab to Db with the resolution to Db made with tritone substitution

B. TOP MELODY

CHORD:

- 1-3 correct voice-leading of functional harmony
- 4-9 active motive of the "hook"
- 10-16 again, voice-led functional harmony

C. HARMONIC MATERIAL

CHORD:

- 6 bars of D Aeolian, clearly perceived, this is linear modal, the emotional quality of Aeolian: dark and melancholy, is additionally tense due to the very fast tempo of this tune
- 2-3 a turnaround cycle
- 4-9 common upper structures

- 10-11 cycle of Ionian chords
- 12-13 tritone substituted II-V to Db (sub for Eb- to Ab13)
- 14 completed cycle of the key centers: Eb to Ab to Db
- 15-16 a "stand alone" II-V, resolved melodically, not functionally

D. GENERAL QUALITIES

- Because of general modality, tempo, and rhythm section style of accompaniment, this is a very sophisticated composition while still being fairly simple in construction. This tune could be described by purists as the "real thing." Referring to the "Tree Of Composers" in the appendix, you can see that Andrew Hill is influenced by Monk. This tune is evidence of that.
- 2. Because of its ties to traditional bebop, this is a good "player's tune," but it is very difficult to play.
- 3. The emotional map is simple with three parts, the dark Aeolian section, the quirky "hook" vamp and the energetic exuberance of the II-V section.

Example 11-14: "Pumpkin" by Andrew Hill



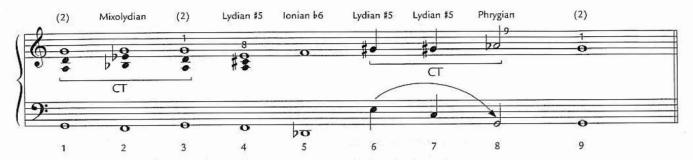




8. TOUCHSTONE1) - RALPH TOWNER

This is another short, compact, gem of a composition by one of the contemporary "master" composers. It starts out as plateau modal and compresses the harmonic rhythm to become vertical.

Example 11-15:



COMMENTS

A. BASS MELODY

CHORDS:

- 1-2 a short 2-note motif, downward
- 3-4 a sequence of 1-2
- 4-5 a relaxed resolution down a major third
- 6-7 outline of a C major triad, increase of tension with the skips
- 8-9 pedal point, clear modal contrast and resolution

B. TOP MELODY

CHORDS:

- 1-3 common tone connection
- 4 6 general upward trend to increase tension
- 6-8 common tones
- 8-9 a step downward for cadence

C. HARMONIC MATERIAL

CHORDS:

- 1 3 common inner structures
- 3-4 abrupt increase in tension (index # 1 to # 8)
- 5 use of exotic chord, Ionian b6, harmonic major (see Chapter XV)
- 6-8 good example of tension index contour, the increase in tension setting up the final cadence
- 8-9 cryptic cadence, upper structure resolving down, index # 9 to # 1

D. GENERAL COMMENTS

- 1. The overall tension contour is derived from an increasing compression of the harmonic rhythm.
- Good combination of tense, stark modes and clear open nonmodal chords. It sounds like it was composed on the guitar.

Oregon, Music of Another Present Era, Vanguard VSD 79326

Example 11-16: "Touchstone" by Ralph Towner



G add2	FΔ ^{‡5}	DP7pe	E Lydian #5 C Lydian	\$5 G Phrygian	G add2
90	<i>y.</i> #8	∳8 ∮8	* ## # 4 # # # # # # # # # # # # # # # #	C pog	0 0 0
):	7.		2 40	C	
0	0	bo	14	0	

HARMONIC CONTOUR - CONCLUSION

One of the best methods for learning composition is to transcribe compositions with harmonic material "above" one's level of abilities. It is difficult because it requires going that "extra mile," but the gains are well worth the pain. A very beneficial project would be to transcribe a section of a Stravinsky piece or a section of a Gil Evans arrangement. Of lesser difficulty, but of great benefit, is to analyze a number of better compositions, those compositions that have that special quality that attracts a listener and becomes a classic, which is what has been done in the last few previous pages. When creating your own compositions, try to organize the harmonic materials with the following:

- 1. Through-composed, with symmetric sections, but not necessarily even numbered bars.
- 2. Modal chord movement that is easily voice-led.
- 3. A chordal or melodic figure that offers a signpost, or "hook" for the listener and improvisor.
- 4. A clear point of climax, note any similarities of climax location in the previous examples.
- 5. A rounded harmonic form last chord resolves to the first chord.
- 6. Keep the harmonic material simple enough for others to play or your tunes will not be played without coercion.
- 7. Have a clear emotional or programmatic "goal" in mind when creating your composition.

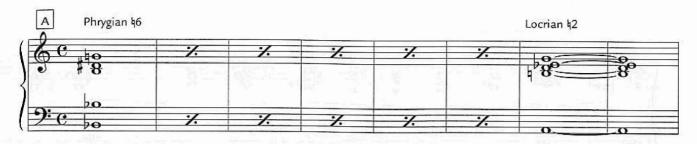
Review the previous compositions with the above in mind, ask if, in fact, the compositions satisfied the proposed guidelines.

SUGGESTED EXERCISES

- Using the included set of chords for the composition "Hello Goodbye," analyze as in the
 previous examples. "Hello Goodbye" is composed by bassist Ron McClure and found on
 the recording The Sun and Moon Have Come Together, (Harvest SKAO-423) by a group
 called The Fourth Way, with Mike Nock, piano; Ron McClure, bass; Michael White,
 violin; and Eddie Marshall, drums.
- 2. Look at the included harmonic synopsis of the composition "Little One" by Herbie Hancock. Compare this with "Ruth," "Mikell's," and "Hello Goodbye." Make as many comments about similarities and differences as you can. The tune is found on Herbie Hancock's Maiden Voyage recording if you want to hear it for reference.
- 3. Analyze any composition of your choice, one that you find really inspirational.

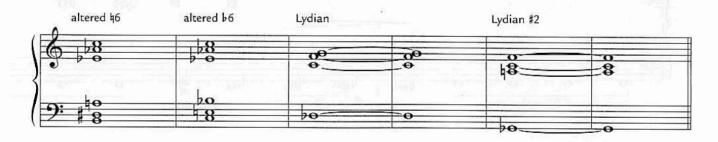
At this point it is time to create the first composition based on the concepts of the previous chapters. In addition, you should analyze the finished composition, as this is of great benefit in pointing out both strengths and weaknesses as well as helping to clarify a developing style.

Example 11-17: "Hello Goodbye" by Ron McClure



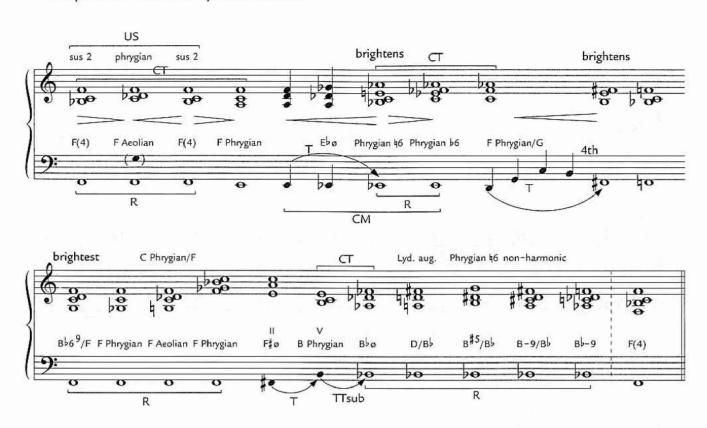


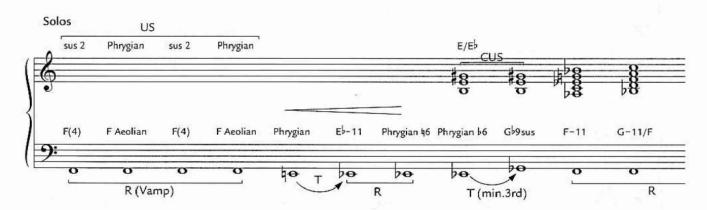


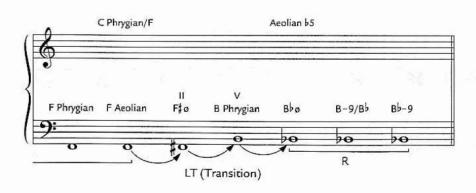




Example 11-18: "Little One" by Herbie Hancock







CHAPTER XII

The Modes and Chords

of Altered Diatonic No.2

(Harmonic Minor)

Using the tetrachord method of construction, the remaining three tetrachords are used in the construction process: harmonic, Hungarian major, and Hungarian minor.

THE TETRACHORD FORMULAS

MODE	TETRACHORDS	SEMITONES	CONNECTOR 2	
Aeolian 47	Dorian & Harmonic Minor	212 & 131		
Locrian \(\frac{1}{6} \)	Phrygian & Hungarian Major	122 & 312	1	
Ionian #5	Ionian & Spanish	221 & 121	3	
Dorian #4	Hungarian Minor & Ionian	213 & 212	1	
Phrygian 43	Harmonic & Phrygian	131 & 122	2	
Lydian #2	Hungarian Major & Ionian	312 & 221	1	
Altered bb7	Spanish & Hungarian Minor	121 & 213	2	

Because of the amount of alteration, the order of darkness is not obvious by looking at the tetrachord formulas. The best process is to compare each mode to its immediate predecessor and determine its quality by the alteration. As an example, Aeolian \$47\$, having the seventh sharped, would be brighter than Aeolian. In addition, the number and placement of tritones in the mode will affect its stability. Notice that Aeolian \$7\$ has two tritones: D to \$Ab\$ and \$F\$ to \$B\$. This would make it more active than unaltered Aeolian.

To restate: Learn to hear these modes and their chords as a form of altered Ionian \$5 or Ionian \$3, \$6).

Example 12-1: The Modes of the Altered Diatonic No. 2 - Harmonic Minor (Ionian b3, b6)







CONSTRUCTION OF THE CHORDS OF HARMONIC MINOR

(Altered Diatonic No. 2, Ionian \$5, Ionian \$3, \$6, Harmonic Minor)

These are mixed spacings which include use of the grip method of chord construction. The following table of color tones is derived again, by camparison with the parent Ionian mode.

THE TABLE

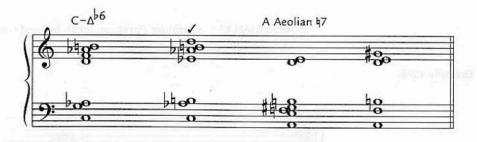
Aeolian 47	b 6	47	2	b 3	5	4
Locrian 46	b 5	6	Ь2	67	b 3	4
Ionian #5	ķ 4	#5	47	3	9	6
Dorian #4	46	#4	Ь3	9	67	5
Phrygian 43	b2	43	5	b7	66	4
Lydian #2	#4	#2	47	3	6	9
Altered bb7	Ь4	bb7	62	b 5	46	b 3

At least the first three of the tones are needed to define the mode. The order of the last three is not strict.

CHORD EXAMPLES

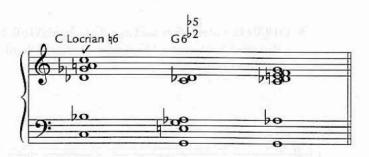
1. AEOLIAN 47 - A brighter form of Aeolian, but less stable. One of the most used of this group.

Example 12-2:



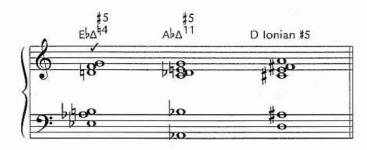
2. LOCRIAN \$6 - Brighter than Locrian \$6, not seen too much, it could be used as a substitute for auxiliary diminished.

Example 12-3:



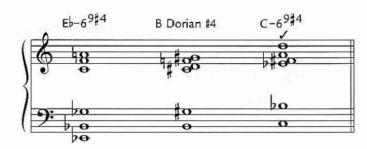
3. IONIAN #5 - Tends to sound like Lydian-augmented \$4, so it is a softer sounding Lydian-augmented or a less stable Ionian \$4. It can be used as a substitute for a Lydian-augmented chord in more romantic compositions.

Example 12-4:



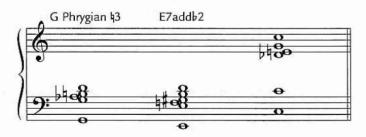
4. DORIAN #4 - A brighter form of Dorian, it had use in pre-modal compositions. The first chord is found in the Horace Silver tune "Sweet Sweety Dee" from Silver's Serenade.

Example 12-5:



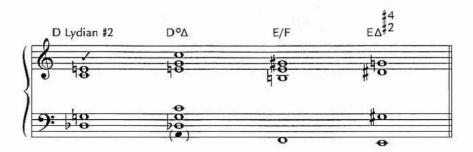
PHRYGIAN \$3 - A brighter Phrygian, it can be used with the auxiliary diminished scale.
 Occasionally used on club dates.

Example 12-6:



 LYDIAN #2 - Most often used as a slash chord (VII/I). Note the optional substitution for a dimished scale over a Mixolydian #9 chord (chord 2). This chord is also known as diminished major 7.

Example 12-7:

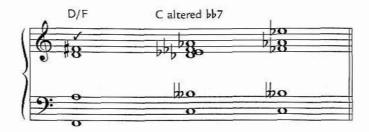


SUGGESTED EXERCISES

- 1. Construct a number of chords with all spacings; include a number of grip method constructions.
- 2. Play all the chords with an ear training goal in mind and try to identify their use on recordings.

7. ALTERED bb7 - Its best use is as a slash chord (VI/I). It also is closely related to the Mixolydian b9 chord and can be used that way.

Example 12-8:



This group of chords is the first of the groups of esoteric modes and chords. Harmonic major and melodic minor \$5 are the last two. The theorist experimentalist among you might want to work with the modes/chords of Ionian \$2 as well. Although the modes of harmonic minor have been used in improvisation the chords are not found that often in compositional use. The chords of harmonic major and melodic minor \$5 (Ionian \$3,\$3) are used by only the most adventuresome of today's composers. David Liebman, Richie Beirach, Ralph Towner, Keith Jarrett, and Joey Calderazzo occasionally use these chords. Check out their recordings.

The emotional description of these modes can be determined in the same way as with all the altered modes: that of taking the descriptions of the parent unaltered modes and considering the alteration as an enhancement. As an example, Phrygian \$3 is brighter than Phrygian \$6, both brighter than Phrygian \$6. The brighter the alteration, the higher the degree of tension. Phrygian \$6 is considered dark and mysterious, Phrygian \$3 is not as mysterious due to its more "open," bright quality, but is still exotic. Since there are multiple alterations in the last three sets of chords, clear categorization is not so easy. It is best to group the chords by ear.

Before we construct the modes and chords of the remaining two groups we will look at one more harmonic connection/composition technique: slash chord harmony.

CHAPTER XIII

Slash Chord Harmony

WORDS OR CONCEPTS TO KNOW:

- 1. Slash Chords
- 2. Polychords
- 3. Cryptic Cadence
- 4. Symmetric Patterns
- 5. Tension Contour

Slash chord harmony refers to the harmonic style in which the chordal relationships and overall development can be applied separately to the upper structure and bass parts of a group of chords. A slash chord is a two-part chord made up of an upper structure over a bass note. The "slash" in the name refers to the standard chord symbol for this kind of construction: a letter representing the upper chord's tonality and a letter representing a single bass pitch, separated by the slash character.

EXAMPLE: E/C, A7/F, Db/C, etc.

Slash chords differ from polychords in that polychords are two- or three-part chords in which each part can be a whole chord. The notation for a polychord is a letter separated by a horizontal line.

EXAMPLE:
$$\frac{D}{C7}$$
 $\frac{D-9}{C\Delta}$ $\frac{G-9}{Ab}$

It is the slash chord that is used most often in modal harmony and, in addition, it is the major triad that is its upper structure. The emphasis of this chapter is on slash chord usage with triadic US.

CHORD CONSTRUCTION

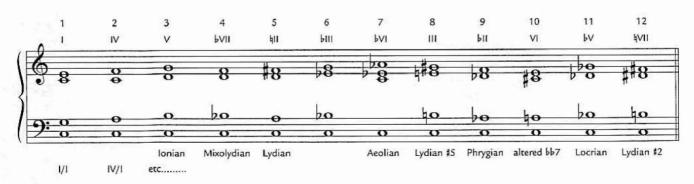
The construction of slash chords follows the same process as found in the chapter on the grip method. If you refer to that chapter you will find that the basic major triad in first inversion is one of the listed grips. An entry level grip, the triad as upper structure has predominant use in the harmony of pop and pop-jazz compositions. The sonority of a consonant triad over a root is stark and sometimes creates missing note, non-modal chords, but has a desired beauty because of its transparency.

To construct slash chords, it is suggested that the student learns the ratio of upper structure to root and its implied modality. As an example, a Lydian-augmented is a III/I, or major triad a major third above the root: E/C.

The following is a construction of major triads over all of the notes of the chromatic scale, offering all possibilities of construction.

In addition, the chords are placed in an order of increased tension as determined by subjective class poll. Because all of the upper structures have the same sonority, their order is affected by both modal contour and sonoric tension/relaxation. And because the modality, in most cases, is obscure, the tension order has priority. Learn the ratios and the tension index number.

Example 13-1: Slash Chords



CHORD CONNECTION

Since the means of chord connection for upper structure chords have been covered in a previous chapter, only the new methods, peculiar to slash chords, will be shown in this chapter. Review the methods in the chapter on upper structure chord connection if needed. The additional methods used in this chapter are the result of the way that groups of chords with transparent sonority need to show a sense of development.

METHODS OF CONNECTION

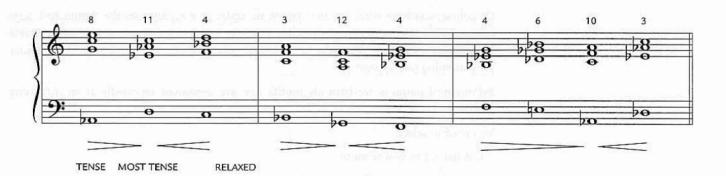
- 1. Common upper structure
- 2. Pedal point
- 3. Modal contour
- 4. Tension coutour
- 5. Cryptic cadences
- 6. Symmetric patterns

The first three are covered in previous chapters.

TENSION CONTOUR

Referring to the tension index number rather than the modal contour, this is the organization of a group of chords, usually three to six, that follow a preset contour of tense to relaxed, relaxed to tense, or a mix of the two. Note that this technique is used most in areas of transition just prior to a repose area, but could be placed anywhere. You must bear in mind the effects of other musical elements: tessitura, harmonic melody, harmonic rhythm, and tempo when composing these.

Example 13-2:

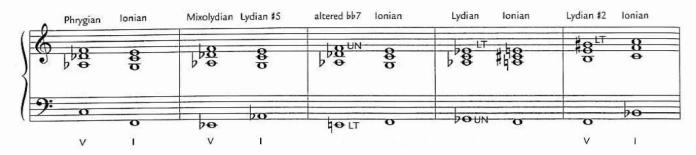


CRYPTIC CADENCES

This is the slash chord version of cadence parody as found in Chapter VII. Rather than mimic modal comparisons, the point of emphasis in this method is on the melodic aspects of the roots of the diatonic cadence and the resolution qualities of voice-leading. The upper structure, being a basic triad, always has its tonic as part of the chord so can be treated as a separate tonality.

You can organize the upper structures as a V-I, the roots as a V-I, and both the US and roots as leading tones resolving upward or upper neighbor tones resolving downward. It is the different ratios of the US to the bass that give a variety of results.

Example 13-3:



Prokofiev: Romeo & Juliet

Mixolydian Lydian #5 Lydian #2 Ionian 6/4 Lydian #5

V I V I

Prokofiev: Romeo & Juliet

6/4 Lydian #5

V I V I

State of the state of

SYMMETRIC PATTERNS

Symmetry in itself defines a sense of organization. In addition, the transparency of the triadic slash chord in no way obscures the symmetric melodic contour, so it is a workable combination to be explored here.

1

There are many sources of examples of melodic symmetry available for reference. The most comprehensive is probably *The Thesaurus of Scales and Symmetric Patterns* by the theorist Nicholas Slonimsky.

Of course, you have access to the symmetric scales of everyday use: the diminished, augmented, whole-tone and chromatic scales. You may find it musically advantageous to be able to compose your own. The process is mathematical, and quite applicable to computer programming (see appendix).

Symmetrical patterns are basically motifs that are sequenced repeatedly at an increasing symmetric ratio.

You need to select:

- 1. A basic 2 to 6-note motif
 - (a) select number of semitones for intervals
 - (b) select directions (up or down)
 - (c) select note values
- 2. An interval of sequence
- 3. A direction of sequence

The combination of the motif and the sequence interval gives the total length of the motif.

EXAMPLE:

- 1. 2-note motif plus one for sequence.
- 2. First note down four semitones (major third).
- 3. Second note up three semitones (minor third).

4. Sequence interval up three semitones (minor third). d4 u3 (u3) d4 u3 (u3) d4 u3 C result: E Eb F# D F Ab E G etc. motif: u1 d3 114 sequence: u2 result: u1 d3 114 d3 (u2) n1Db C F D F G# C# A# etc.

To create symmetric scales, keep the motif length under three and keep them all in the same direction. A 1-note motif is best.

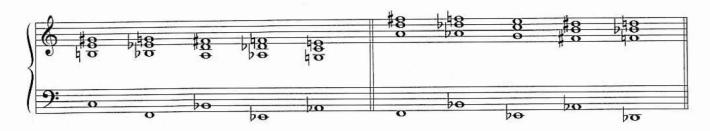
EXAMPLE 1: motif: sequence: 2 result: C Db Eb E G Bb C (aux. diminished scale) EXAMPLE 2: motif: 3 2 sequence result: 2 Db E ВЬ C G C (works with C alt)

HARMONIZING THE SYMMETRIC PATTERNS

PROCEDURE

Once you have created or selected the symmetric patterns you will use, the process is to place the US triad with the top note following the symmetric melody. There are thirty-six possible modal results of the combination of a triad over its root. There is the choice of one of twelve semitones of the chromatic scale, where the top melody's starting note is placed, multiplied by the choice of one of the three inversions of the upper triad. Each one of those choices creates a chord with modality that differs from the results of another choice. The easiest way to begin is to determine a median range tessitura for the top and bass melodies within their usually found ranges. As an example, if the top melody has six notes which span over an octave going downward, you will need to start the melody above the second C above middle C. This would result in the overall melody being in a median tessitura. Follow the same procedure for the bass melody. Once the tessituras are set, select a modality for the first chord. Refer to Example 13-4 (bar 1), the first root is a C; by selecting a G# for the starting note of the top melody, with the selected inversion of the triad, the resulting modality is Lydian augmented. Had the top melody started on a G natural instead, the first chord would have been a C-7. You will need to experiment with various starting notes to create a group of chords with aesthetically satisfying modal contour. The harmonic results of this technique are used in active areas of the harmonic scheme: turnarounds, the transition areas that approach a repose area and, if the harmonic rhythm is slow enough, a set of these chords could be the entire content of a section.

Example 13-4: Harmonized Symmetric Patterns



Top: chromatic scale, down

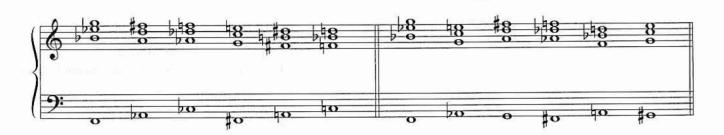
Bass: cycle of fifths

Start: Lydian-augmented

Top: chromatic down

Bass: cycle

Start: Locrian bb7



Top: chromatic down

Bass: sequenced thirds

Start: Mixolydian sus 4

Top: sequenced pattern

Bass: sequenced pattern

Start: Mixolydian sus 4



Top: auxiliary diminished scale

Bass: sequenced Dorian tetrachord

Start: Ionian, no 3

As you can see from the examples, the symmetric motif starts to repeat after a number of chords. The modal contour repeats as well. When creating these examples, you need to include enough chords to show the pattern of repetition.

ANALYSIS OF SLASH CHORD HARMONIC CONTOURS

The analysis of slash chord harmonic contours is pretty much the same procedure as with non-slash chord contours. In addition to that which was covered with non-slash chord harmonic schemes, we will point out US to bass ratios, symmetric patterns, and cryptic cadences. Where we had concern for brightness to darkness comparisons and momentum contours, now we need to point out tension contours. We will look at four compositions, all have harmonic contours that can be organized as slash chords and all have typically romantic melodies (covered in Volume 2).

1. LOST ILLUSIONS1) - RON MILLER, 1978

This is a very stark sounding composition, its harmonic construction being primarily derived from slash chords. Its tempo is very fast. The emotional intent is anger. There are two sets of changes, one for the "head" and one for "blowing," this is to make the improvisation more accessible and gives the composition a stronger sense of development.

Example 13-5:



COMMENTS (the "head" portion)

A. BASS MELODY

CHORDS:

- 1-2 increased tension with the upward skip
- 3 passing note to set up tessitura of the bridge section
- 4-9 cycles sequenced down chromatically
- 10-11 another cycle, up a major second from last
- 12 upper neighbor to next section
- 13-15 common tone (pedal point) connection
- 16-17 the much used minor third upward movement

B. TOP MELODY

CHORDS:

- 1-2 color tones
- 3-4 contrary motion
- 5-6 common tone
- 7-8 common tone
- 5-11 general overall downward chromatic melody, the chords of the bridge were derived from symmetric patterns: top-chromatic down, bass-cycle of fifths
- 11-17 common tone connection
- 18-20 upward movement to increase tension for resolution to the top of the tune

C. HARMONIC MATERIAL

CHORDS:

- 1-2 parallel Lydian-augmented chords, plateau modal, approaching linear
- 3-20 the Lydian-augmented, Mixolydian sus combination that is a result of the symmetric pattern method of construction
- 3-4 cryptic cadence-V-I in upper, upper neighbor down in bass
- 5-6 common US
- 7-8 common US
- 9-10 pattern, contrary motion minor third up for top, minor third down in bass
- 11-12 common US
- 13-15 modal shift
- 16-17 common US and the much used diatonically related Phrygian to Mixolydian
- 18-19 parallel Mixolydian sus chords
- 19-20 cryptic cadence

D. GENERAL QUALITIES

- Although more plateau than linear, the emotional quality of Lydian-augmented-active, tense and bright comes through.
- 2. The bridge is still very active due to the faster harmonic rhythm it is vertical modal and due to the implied cycle, root movements of a fifth are the most active of any.

COMMENTS ON THE BLOWING CHANGES

Actually very close to the "head" changes, the differences are:

- 1. More symmetric harmonic rhythm.
- 2. Clear cycle of fifths in the bridge with...
- 3. ...a shift of the symmetric pattern at chord 8 to allow...
- ...a dominant sus 4 chord as the last chord which will resolve to the first chord, giving a "rounded" form.

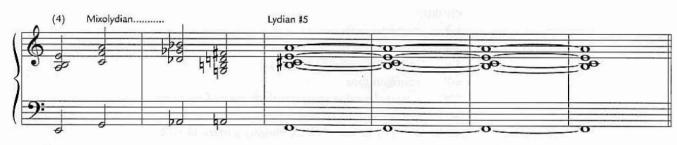
All of the above show a concern for making the tune more "playable."

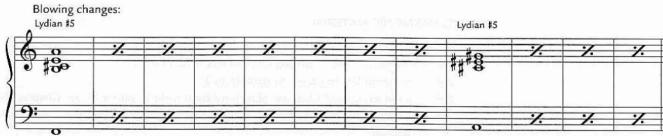
Example 13-6: "Lost Illusions" by Ron Miller











Mixolydian	Lydian \$5	Mixolydian	Lydian #5	Mixolydian	Mixolydian	Lydian #5	Mixolydian
8	#8	8	#8	\ \ \ \ \ \ \ \ \ \	8 0	#8) <u>8</u>
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2. YELLOW FIELDS1) - EBERHARD WEBER

This is a compact and clearly vertical modal composition with good examples of slash chord formulas. The melody, not being romantic in style, adds to the starkness of the harmonic style.



COMMENTS

A. BASS MELODY

CHORDS:

- 1-4 downward stepwise, nondiatonic
- 5-6 the tritone skip down is very active, an implied cycle
- 7-8 upward minor third, contrary motion to top melody, a slash chord pattern
- 9-13 starting high in the tessitura, the downward contour assists in setting up the climax
- 13-14 the root movement of a V-I

B. TOP MELODY

CHORDS:

- 1-2 common tones
- 3-4 common tones
- 5-6 implied voice-leading of a cycle
- 6-7 common tone
- 7-8 contrary motion to bass melody, part of a pattern
- 9-13 parallel motion to bass melody
- 13-14 contrary motion to bass, another pattern like 7-8

C. HARMONIC MATERIAL

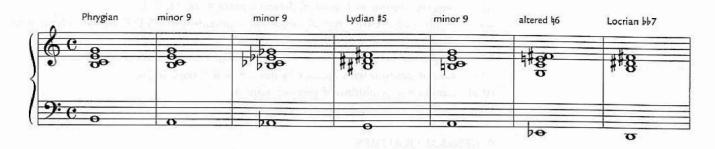
CHORDS:

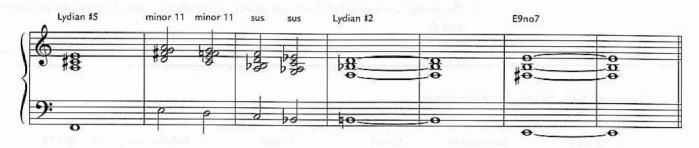
- 1-2 common upper structure, tense to less tense (9 to 6)
- 3-4 common US, less tense to tense (6 to 8)
- 5-6 a hidden C triad CUS, use of a chord from melodic minor #5 (see Chapter XV)
- 7-8 a pattern of top triad down a major second, bass up a minor third, also a release of tension
- 9-13 parallel modal chords setting up the climax on a very tense Lydian #2 chord
- 13 the point of climax
- 13-14 a V-I release of all the previous tension, the sus 2 (9 no 7) nonmodal chord being very bright, relaxed and final; this is a great example of cryptic cadence

D. GENERAL QUALITIES

- 1. This is a very well written and compact composition; Eberhard is one of the contemporary "masters." All his compositions show a great deal of intelligence and musicality.
- 2. Being vertical modal, the emotional contour is derived from other aspects than modality.

Example 13-8: "Yellow Fields" by Eberhard Weber

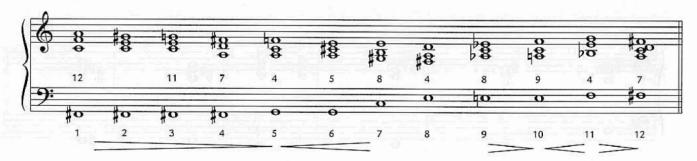




3. SOLSTICE1) - KEITH JARRETT ca. 1973

This very short, through-composed piece, at first glance seems quite simple. But, as the analysis reveals, there is hidden darkness here. The composition is one large tension contour with a gradual increase to a final release.

Example 13-9:



COMMENTS

A. TOP MELODY

CHORDS:

1-8 lengthy chromatic melody, downward, getting darker

8-11 a short upward return, preparation for the following...

11-12 ...upper neighbor resolution downward

B. BASS MELODY

CHORDS:

1-4 common tone, repose area

5 - 7 transition area by cycle

8-10 repose

11-12 short transition, leading tone up

1) Belonging, ECM 1050

C. HARMONIC MATERIAL

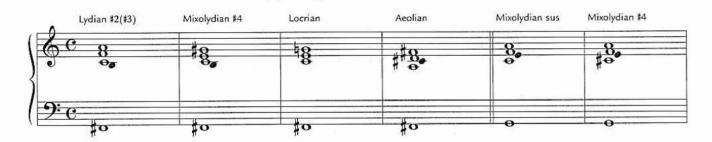
CHORDS

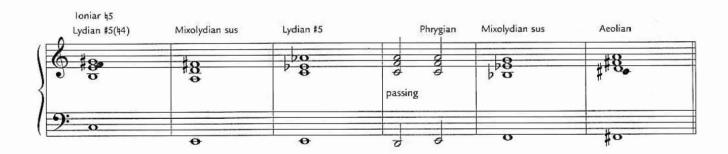
- 1-5 tension contour with gradual decrease, index #: 12, 11, 7, 4
- 4-5 cryptic cadence with typical minor third movement in US D-F, modal cadence with first inversion D to a G Mixolydian chord
- 6-7 modal cadence as dominant cycle Mixolydian #4 to Lydian-augmented
- 8-10 tension contour with increase by index #: 4, 8, 9 resolving to...
- 10-11 ...index # 4, resolution of previous tension
- 11-12 pattern of chromatic contrary motion

D. GENERAL QUALITIES

- The overall tense and dark harmonic quality is softened by the composition's romantic melody.
- 2. The long tension contour creates an emotional quality of being "rhapsodic." In addition, this is the emotional quality of the subsequent improvisation.

Example 13-10: "Solstice" by Keith Jarrett





SUGGESTED EXERCISES

PART I

- 1. Create four symmetric patterns, motif length two to four.
- 2. Harmonize six examples of symmetric patterns in both the upper and bass parts.
- 3. Create four symmetric scales; present like in the previous pages.
- 4. Create four cryptic cadences; label method used (see examples in text).
- 5. Create four tension contours; label tension index, and include cresendo and decresendo markings to show intended contour.

PART II

Analyze the included synopsis of the composition "Ana Maria" by Wayne Shorter by the methods shown for previous examples. It is found on the CD *Native Dancer* (CBS VCK 46159) if you need a listening.

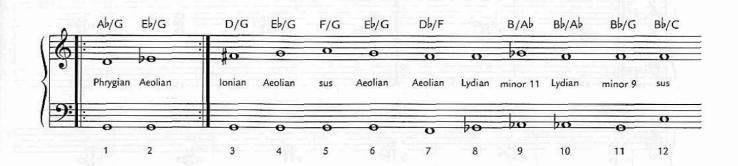
PART III

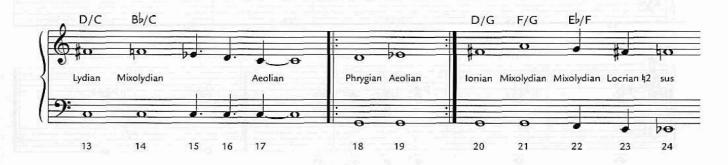
- Create a set of chords for a composition in which all or a large section of the chords is derived from symmetric patterns, tension contour, or cryptic cadences.
- 2. Analyze the finished composition, using the examples of this chapter as a guide.

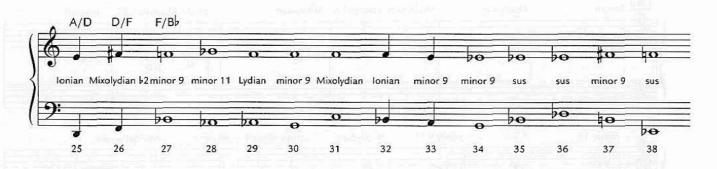
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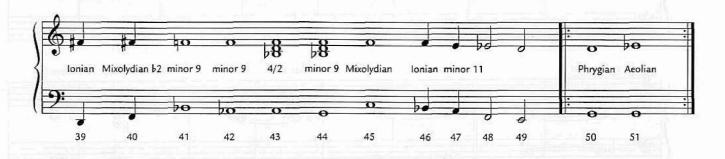
CHAPTER XIII

"ANA MARIA" BY WAYNE SHORTER - HARMONIC SYNOPSIS









"ANA MARIA" BY WAYNE SHORTER



CHAPTER XIV

Three-Part

Upper Structure

Chords

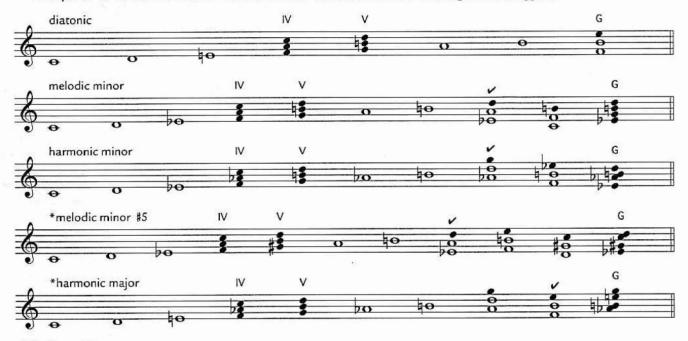
Three-part upper structure chords are chords which can be separated into three parts, each part contributing to the chord's modal definition.

The three parts are:

- 1. THE ROOT
- 2. AN INNER STRUCTURE which contains a tritone, as found in the acoustic source scale. If there is more than one tritone present, the one containing the third of the acoustic source scale is preferred. These, of course, are the grips found in Chapter VI.
- THE UPPER STRUCTURE TRIAD is one of the triads found on either the fourth or fifth degrees of the parent scale, which is usually a major triad unless it has alterations.

As you can see, this is a form of the grip method of chord construction with the addition of the upper structure triad. Also known as "rootless" voicings, for keyboard playing, the grip is played by the left hand with the triads played by the right. The root is completed by a bass player or by prior playing by the pianist's left hand in the method of "stride" pianists.

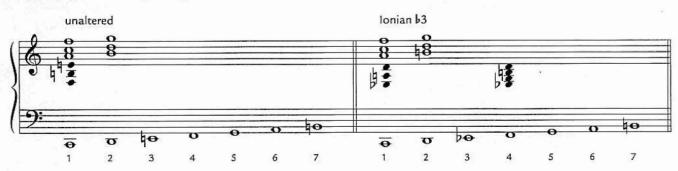
Example 14-1: The acoustic source scales with triads on their fourth and fifth degrees and suggested inner structures

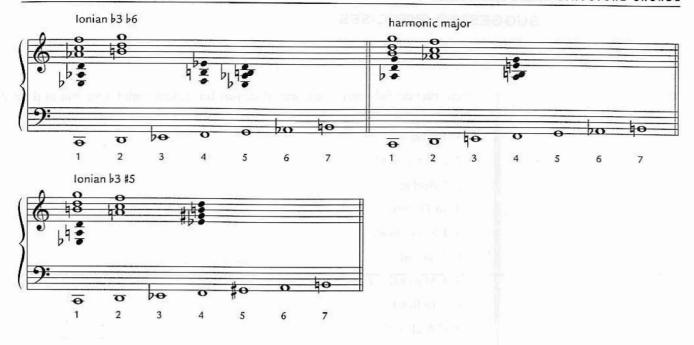


*) See Chapter XV

With the inner structure and the top triads together acting as a combined upper structure, the process for creating chords is the same as with two-part chord construction: placing the US over all the roots of the parent acoustic source or experimenting by placing them over the remaining roots that are in the chromatic scale.

Example 14-2: Placing the upper structures over the acoustic source





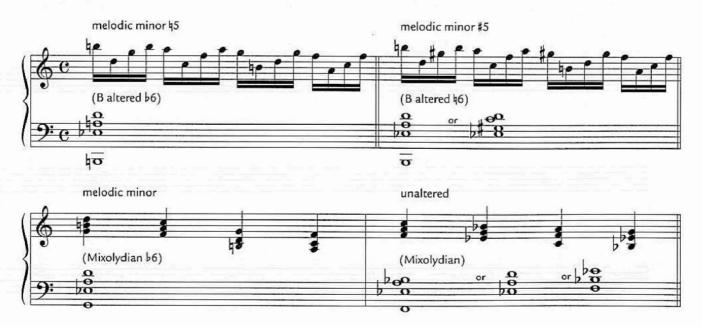
The resulting modality of all of the above is found in previous chapters.

To find the acoustic source, resolve the tritone that has the leading-tone natural 7.

EXAMPLE: The C melodic minor example (bar 2 of Example 14-2) has the tritone F to B which resolves to C Ionian \(\begin{align*} \begin{align*} \delta & \de

Because one triad by itself, in most cases, dosen't fully define a chord's modality, you often find that both triads are used in combination, on different beats, of course.

Example 14-3: Use of both US triads



The three-way upper structure technique is not found only in jazz harmonic systems; it is a prominent technique of film scoring, big band arranging, and classical music. Try to identify its use in your listening sessions.

SUGGESTED EXERCISES

Construct the following chords with three-part US. Include both US for four of them. Also include a chord symbol over the chord.

- 1. Eb Ionian 44
- 2. E Phrygian \3
- 3. F Aeolian
- 4. Bb Dorian
- 5. Db Aeolian b5
- 6. E altered
- 7. F Mixolydian #4
- 8. F Lydian #2
- 9. C Aeolian 47
- 10. G Mixolydian 46

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			\$ v	2	
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			\$ v	2	
			\$ v	2	

The Modes and Chords of

Altered Diatonic No.3 and No.4

IONIAN 66 (Harmonic Major) and IONIAN 63 \$5 (Melodic Minor \$5)

These last two sets of modes and their chords are the most esoteric of the jazz harmonic vocabulary. Use of material from the first group is found on only the most contemporary of harmony based compositions. Use of some chords from the second group can be found in early jazz harmony but without a reference to its source.

A. IONIAN 66 (HARMONIC MAJOR)

THE TETRACHORD FORMULAS

MODE	TETRACHORDS	SEMITONES	CONNECTOR
Ionian b6	Ionian & Harmonic	221 & 131	2
Dorian b5	Dorian & Hungarian Major	212 & 312	1
Phrygian 64	Spanish & Phrygian	121 & 122	3
Lydian b3	Hungarian Minor & Ionian	213 & 221	1
Mixolydian b2	Harmonic & Dorian	131 & 212	2
Lydian-aug. #2	Hungarian Major & Spanish	312 & 121	2
Locrian bb7	Phrygian & Hungarian Minor	122 & 213	1

As with previous altered diatonic modes, the descriptions can be determined by a comparison with the parent Ionian, pointing out the differences obtained by the alteration. Ionian b6 is a darker version of Ionian, Lydian-augmented \$2 a brighter and more tense version of Lydian, etc.

Example 15-1: The Modes of Harmonic Major







CONSTRUCTION OF THE CHORDS OF HARMONIC MAJOR

THE TABLE OF COLOR TONES

Ionian 66	b 6	7	4	3	5	2
Dorian b5	b 5	6	Ь3	4	2	67
Phrygian 64	64	b2	5	b3	b6	67
Lydian b3	b3	#4	7	2	5	6
Mixolydian b2	b2	b7	3	4	6	5
Lydian-augmented #2	#2	#5	7	3	#4	6
Locrian bb7	bb7	b5	b2	Ь3	4	₽6

At least the first three of the tones are needed to define the mode. The order of the last three is not strict.

REPRESENTATIVE CHORD EXAMPLES

1. IONIAN 66 - Sounds like a dreamy Lydian-augmented or a dark Ionian; include the \$5 to show that it isn't Ionian \$5 or Lydian-augmented.

Example 15-2:



2. DORIAN 65 - Has an implied diminished sound, including the \$4 verifies that it isn't Dorian \$4.

Example 15-3:



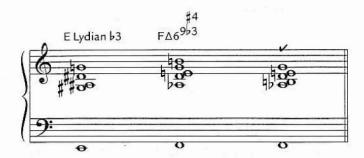
3. PHRYGIAN 64 - Similar to altered \$6, including the \$5 verifies it isn't. It has a very "dominant" sound.

Example 15-4:



4. LYDIAN b3 - Being similar to Lydian #2, include the \$2 for verification (see "Mikell's" by Calderazzo.

Example 15-5:



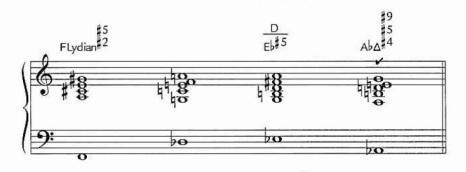
5. MIXOLYDIAN b2 - This is the source of the much used dominant b9 chord.

Example 15-6:



6. LYDIAN-AUGMENTED #2 - Can sound like a slash chord, A∆/F, or polychord D/E♭\$5.

Example 15-7:



7. LOCRIAN bb7 - A brighter, more active sounding Locrian.

Example 15-8:



Because of the ambiguity and resident tension of most of these chords, they should be either mixed with more conventional chords or used with slower harmonic rhythm. Of course, there will be a number of composers who find these chords to quite satisfy their aesthetic requirements.

B. IONIAN 53 #5 (MELODIC MINOR #5)

This group of modes contains some very beautiful chords for achieving a modern sound. The combination of the darkness of the flatted third with the brightness of the sharped fifth of the source scale offers a great quality of "interest." A number of these chords have been in use from the times of Mingus to Brecker, but there has not been too much, if any, explanation of their source and construction. Two such chords found in common use are the Mixolydian \$9 and the altered \$6\$. In addition, two new tetrachords are introduced and used in the mode's construction. Looking at the exotic tetrachord combinations, one wouldn't think these modes/chords would sound as good as they do. Also, note that these modes are a form of missing note diminished scale and all the chords can be used with a diminished scale – or for improvisors, the diminished scale can be used with any of the chords (see tetrachord construction in the appendix).

THE TETRACHORD FORMULAS

MODE	TETRACHORDS	SEMITONES	CONNECTOR
Dorian 47 #5	Dorian & Spanish	212 & 121	3
Phrygian \6 #4	Hungarian Phrygian & Dorian	123 & 212	1
Lydian #5 #3	Hungarian Pentatonic & Spanish	231 & 121	2
Mixolydian #2 #4	Hungarian Major & Dorian	312 & 212	1
Altered bb6 bb7	Spanish & Hungarian Phrygian	121 & 123	2
Aeolian 47 b5	Dorian & Hungarian Pentatonic	212 & 231	1
Altered 46	Spanish & Hungarian Major	121 & 312	2

Example 15-9: The Modes of Melodic Minor #5







CONSTRUCTION OF THE CHORDS OF MELODIC MINOR #5

THE TABLE OF COLOR TONES

Dorian 47 #5	#5	b3	46	47	2	4
Phrygian \6 #4	#4	b2	46	67	Ь3	5
Lydian-augmented #3	#3	#5	47	#4	6	2
Mixolydian #2 #4	#2	b7	3	#4	6	5
Altered bb6 bb7	bb6	bb7	64	Ь2	b3	b 5
Aeolian b5 47	b 5	47	b6	Ь3	2	4
Altered 46	46	Ь3	64	b2	b7	b5

REPRESENTATIVE CHORD EXAMPLES

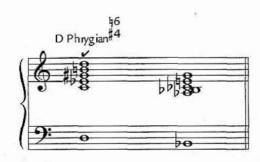
1. DORIAN 47 #5 - bright and tense

Example 15-10:



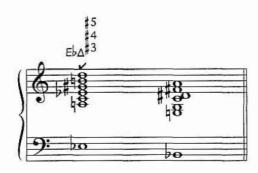
2. PHRYGIAN 46 #4 - brighter

Example 15-11:



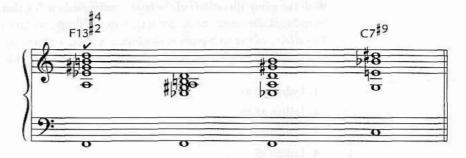
3. LYDIAN-AUGMENTED #3 - sounds "dominant"

Example 15-12:



4. MIXOLYDIAN #2 #4 - the much used \$7#9 chord is in this group

Example 15-13:



5. ALTERED bb6 bb7 - not used much

Example 15-14:



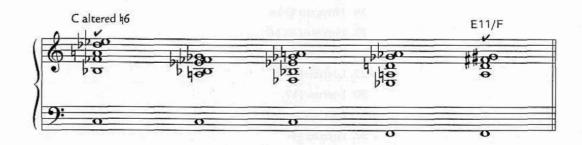
6. AEOLIAN 47 b5 - not much Aeolian quality left

Example 15-15:



7. ALTERED 46 - the most used of this group, has a very positive sound

Example 15-16:



This completes the construction of all the chords that will be presented for use in Volume 1 of this textbook. Not including the nonmodal group of chords, we have a formidable palette of thirty-five modal colors with which to work.

Looking at the section on tetrachord construction in the appendix, one can see the possibilities of unusual combinations and the creation of many more esoteric modes and their chords. Of course, with the listener of your creative efforts taken into account, more than a few of these and the newly created chords may not be accessible. But experiment anyway; eventually the world will "catch up."

THE COLLATED ORDER OF ALL CONSTRUCTED MODES

With the many alterations of the later constructed modes, there is much harmonic ambiguity introduced. Determining an accurate order of bright to dark is not as easy as it would seem. The effects of the ambiguity is to obscure a clear comparison. But by considering a sharping of a pitch as a brightening and a flatting as a darkening, this is the resulting order:

- 1. Lydian #5 #3
- 3. Lydian #2
- 4. Lydian 45
- 5. Lydian b3
- 6. Ionian #5
- 7. Ionian \$5
- 8. Ionian b6
- 9. Mixolydian #2 #4
- 10. Mixolydian 42 #4
- 11. Mixolydian b6
- 12. Mixolydian 42 44
- 13. Mixolydian b2 44
- 14. Dorian \\$7 \#5
- 15. Dorian 47 45
- 16. Dorian 47 b5
- 17. Dorian b7 #4
- 18. Dorian 67 44
- 19. Aeolian 47 45
- 19. Aconan 47 43
- 20. Aeolian 47 b5
- 21. Aeolian 57 45
- 22. Aeolian b7 b5
- 23. Phrygian 47 #5
- 24. Phrygian \$6 \$425. Phrygian \$6 \$4
- 26. Phrygian \\ \delta \\ \b6
- 27. Phrygian b3 b6
- 28. Locrian \6
- 29. Locrian 66
- 30. Locrian bb7
- 31. Locrian b4
- 32. Locrian 44
- 33. Altered 46
- 34. Altered bb7
- 35. Altered bb6 bb7

The emotional qualities also can be obscured by the added tension of the alterations, but considering as before, the basic qualities of the unaltered modes being enhanced by the alteration, Mixolydian #2 #4 has the same qualities as the unaltered Mixolydian #4 but a bit brighter and more active.

SUGGESTED EXERCISES

- 1. Construct a number of chords with all spacings; include a number of grip method constructions and a few three-part upper structure constructions.
- 2. Play all the chords with an ear training goal in mind; try to identify their use on recordings.

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CONCLUSION

This concludes the presentation of the materials of Volume 1 of this book. Although there is sufficient information for the creation of beautiful and forward-looking harmonic schemes, harmony alone does not define music. Needed to be covered are the elements of melody, rhythmic concepts, style, and tonal harmony.

Tonal harmony is so prevalent in the student's continuing educational and listening background that further study is not that critical. Awareness of its use within style categories is important to acquiring a well-rounded harmonic concept. In particular, looking at the use of tonal harmony by the masters of that genre – Thelonious Monk, Charles Mingus, Tadd Dameron and Benny Golson – can be of benefit.

Referring to The Categories of Jazz Compositions found in the introduction of this book, it is apparent that there is a diversity of jazz styles, each with their own particular descriptions of harmonic, melodic, rhythmic, and orchestral implementations.

The serious jazz composer should be aware of those means of implementation and be able to compose in any of the listed styles. Even if the primary goal of the composer is to develop a single personal style, the ability to compose in all styles will only enhance and clarify the development of one's own style.

The goals of further volumes of this book are toward that end, with the presentation of the following subjects:

- 1. Harmonization/reharmonization techniques
- 2. Pentatonic and blues tunes
- 3. Tonal harmony: Monk, Mingus, and hardbop
- 4. Romantic melody writing
- 5. Avant-garde jazz compositions
- 6. Group compositional styles

Without access to further volumes, the student should pursue his own regimen of study by transcribing and analyzing a number of compositions from each category and compose within the studied style.

We cannot conclude without reminding the student that he must bring the process to its consummation: The presentation of his efforts to an attentive audience, whether through a live performance or through the recording process.

Appendix

- 1. ACOUSTICS AND MODALITY
 - (a) The Overtone Series
- (b) Determining the PARENT SCALE and ACOUSTIC SOURCE
 - (c) Chord Stability
 - (d) Determining the Color Tones
 - 2. CONSTRUCTION OF THE TETRACHORDS
 - 3. ADDITIONAL EXAMPLES
 - (a) Common Connection
 - (b) Symmetric Patterns
 - (c) Computer Generated Examples
 - 4. EAR TRAINING
 - 5. TREE OF INFLUENTIAL JAZZ COMPOSERS
 - 6. DISCOGRAPHY-BIBLIOGRAPHY
 - 7. ABOUT THE AUTHOR

ACOUSTICS AND MODALITY

The following is not meant to be a treatise on the science of acoustics but a cursory introduction to the subject for referential purposes. The student whose interests require a more in-depth study should consult either *The Craft of Musical Composition* by Paul Hindemith, Contemporary Harmony by Lumila Ulehla, or Modern Harmonic Technique by Gordon Delamont.

All acoustic explanation for that which occurs in harmonic and melodic application can be derived from a reference to the Overtone Series.

The overtone series (OS) is a phenomenon which is as much a part of our natural universe as is the force of gravity. Just as the prism splits the spectrum of light into a fixed order, the OS produces a series of pitches following strict natural law. Any sounded tone produces additional tones (overtones and sometimes undertones) of varying intensity. It is this variation of the intensity of the generated overtones that creates timbre.

The OS consists of partials: a fundamental pitch and its overtones.

Our use of the OS requires only the knowledge of partial ratio and partial number. It is suggested that the serious student memorize the ratio of the pitches of the OS, i.e., the intervals - P8, P5, P4, etc.

THE OVERTONE SERIES:



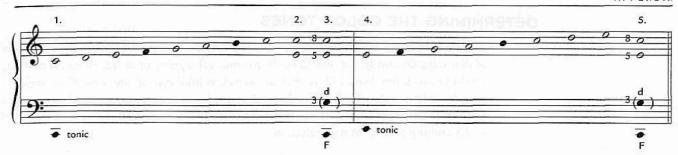
DETERMINING THE PARENT SCALE

The parent scale, our point of reference in the stability comparisons, is the Ionian mode or commonly known as the major scale. We know by intuition and by actual listening experience that the mode seems totally "at rest." Taking a look at all asymmetric scales, one will find an interval of a tritone (sometimes there are two in altered scales). Tritones have a strong desire to resolve, up or down depending on the acoustic source. The interval of the resolved tritone is the point of reference for determining a scale's degree of stability.

When two pitches (an interval) are sounded together, a third pitch (or sometimes more) is generated naturally. This pitch is called a combination tone. Combination tones are usually determined by finding the difference in the ratio of the frequency of the sounding pitches. It is sufficient to refer only to the partial number. As an example, if the two tones being produced are middle C and G a P5 above, their partial numbers are 4 and 6, the difference tone in this case would be 6-4 = 2 or the second partial, which is C below middle C. There are cases where additive tones are produced, but they are usually inaudible and not of particular interest to us.

The point of all this is that of all the possible asymmetric scales in use, only Ionian has a tritone resolution that produces a difference tone that completes the construction of a major triad on the tonic of the scale, allowing a complete state of repose.

^{*)} The filled pitches are slightly out of tune.



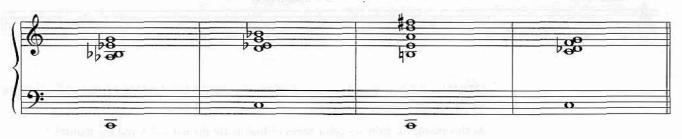
- 1. The major scale, with the tritone in filled notes.
- 2. The resulting interval and partial numbers.
- 3. The computed difference tone, creating a triad.
- 4. A Phrygian mode, with the tritone in filled notes.
- 5. The results, a triad not built upon the mode's tonic.

ACOUSTIC SOURCE

The acoustic source is the Ionian mode whose root is the fundamental of the overtone series, defined by the tritone resolution shown above. For the Phrygian example above, it is C Ionian. Of course, the quick way is to refer to a mode's key signature: C Lydian's is G, Eb Aeolian's is Gb, etc.

CHORD STABILITY

A chord's stability or instability is a result of the divergence of the vertical spacing of the chord's tones from the natural placement of those tones in the overtone series. The degree of difference gives the resulting chord quality a "bite," starkness, or consonance. A chord's spacing can pervert the OS in these ways: a partial can be altered, it can be transposed, or it can be both altered and transposed. In addition, the chord's tessitura can effect a dark or bright quality by a diffusion of the chord's fundamental. If a chord is too low, the resulting placement of its fundamental may be below the range of hearing, creating the effect of all the chord's pitches being transposed partials.



- 1. G no change
- 2. Eb altered, darker
- 3. Bb displace down an octave, tense
- 4. Ab altered & displaced, dark & tense

Result: quite dark, not too unstable

- 1. Bb right on!
- 2. G OK
- 3. Eb altered, a bit darker
- D displaced an octave, a bit less stable

Result: not too dark, not too tense

- 1. F# where it should be
- 2. D OK
- 3. A down an octave, a bad tense
- 4. E unchanged
- 5. B4 altered & displaced, bright & tense

Result: a bright and slightly tense

- 1. G OK
- 2. F displaced & altered, dark & tense
- 3. Db altered & down an octave, dark & tense
- 4. C OK
- 5. C OK, but not the fundamental, a bir weak

Result: quite dark and tense

The next step here is to play these chords and compare the subjective results. Try different tessituras, note the result.

Hindemith points out that the changes in partial placement and spelling results in an actual increase in energy through molecular activity. Try to hear an increase in "heaviness" in the tense spacings.

DETERMINING THE COLOR TONES

A chord that would most clearly define the modality of a scale would contain all seven notes of that scale. Obviously, that would not be too musical; a group of chords all voiced that way would be much too dense and overbearing as well as inhibitive of any sense of voicing contour. In order to select fewer notes that will give us the transparent spacing that is needed while still defining the particular modality of the scale we are representing, we need a method to determine a priority of note selection.

THE METHOD

As shown on previous pages, the Ionian mode is the most stable of all the 35+ modes available for use in contemporary jazz composition.

Even without investigating its acoustic properties, the listener "knows" that the Ionian mode is the one with the least desire to resolve. So, from this point on, we will consider it axiomatic that the Ionian mode will be the point of comparison for all other modes, whether they are brighter or darker than the compared Ionian.

With this in mind, to determine the modal definition of any scale, we need to make a note-tonote comparison with the Ionian mode that has the same root as the mode to which it is being compared. The notes that differ are the notes we will use to define the new mode chordally.

As the following examples show: Lydian could be thought of as Ionian with a sharp 4, the sharp 4 being the only difference between Ionian and Lydian built on the same root. Dorian could be thought of as Mixolydian with a flat third or as Ionian with its third and seventh flatted. To determine the primary color tone, a comparison with a mode's immediate predecessor must be made, and the remaining color tones are derived from cycling back to the original Ionian. As one can see, this would give us a flat sixth as the primary color tone of Aeolian and a natural sixth as the primary color tone of Dorian. The process goes on...

DERIVING THE COLOR TONES



LYDIAN is brighter than Ionian and refers to a sharper key. It is like Ionian with a sharp 4. Sharp 4 is its primary color tone.

At this point, the primary color tones of Ionian are the natural 4 and the natural 7.



MIXOLYDIAN has the same spellings as Ionian except for the alteration of the flat 7. Flat 7 and natural 4 are its primary qualities.



DORIAN is a darker version of Mixolydian. Looking ahead to Aeolian, because Aeolian has a flat 6, the primary quality of Dorian is natural 6.



AEOLIAN is clearly in the realm of darkness, with so many flats. Flat 6 is its primary color tone, natural 2 (9) completes it.



PHRYGIAN'S primary color tone is flat 2. There will be more Phrygians to come and flat 2 is a primary quality of all of them.



LOCRIAN is so altered it approaches another key center. It is like Phrygian with a flat 5. Flat 5 is the primary quality of Locrian.

Notice that many of the note choices include the pitch that is found a tritone from the primary color tone; that pitch is usually definitive of the mode. (Ex: the natural 2 of Aeolian, the fifth of Phrygian). Looking at the *acoustic source* there is a tritone between two of the notes: C Ionian's are F and B, and the two usually are found in the first two notes of the order table.

This also explains why Lydian and Locrian are special modes regarding resolution tendencies; they both have a tritone built from the root.

The method for determining color tones is the same for the altered diatonic modes. The above example should be sufficient as a guide if a student wants to pursue that assignment.

CONSTRUCTION OF TETRACHORDS

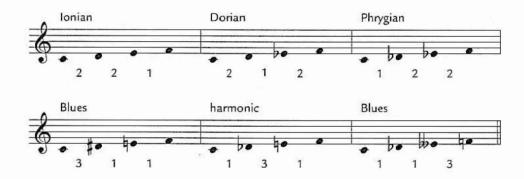
There are many more tetrachords that can be used by the forward-looking composer than is found in contemporary examples. The following is a method for constructing the tetrachords presently in use, as well as a means for deriving new ones.

The only "rules" to follow are to include four notes and to keep the sum of the semitones of the tetrachord within the definitive limit. If the tetrachord is to be used to construct modes, the sum should not be higher than six semitones – a limit of less than four semitones would give a tetrachord that could not be transposed. In addition, one should assure that the pitch sequence follow the normal alphabetical sequence: A B C D, C D E F, etc. A semitone limit above six allows the creation of pentatonic and other special use tetrachords. A few will be included here and the subject will be covered in more detail in Volume 2 of this textbook.

Example: 4 Semitones



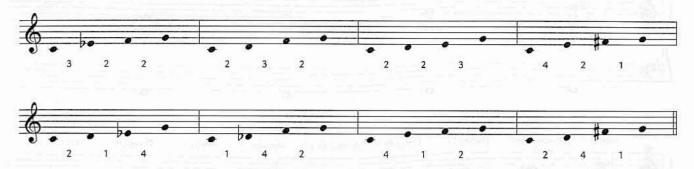
Example: 5 Semitones



Example: 6 Semitones



Example: Pentatonic Tetrachords (perfect fifth limit)

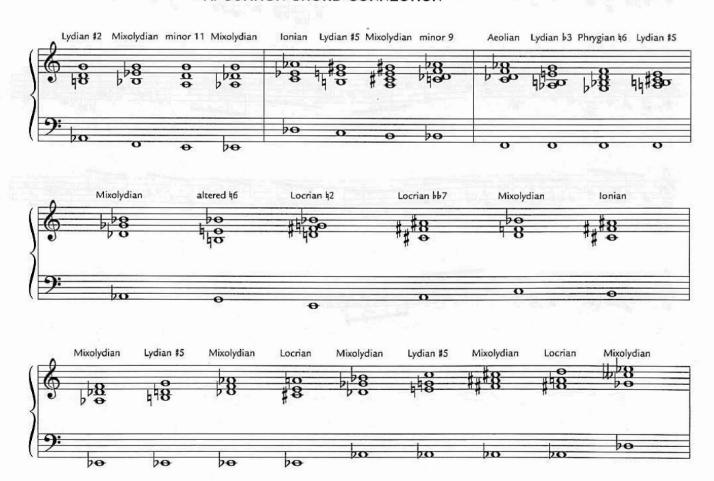


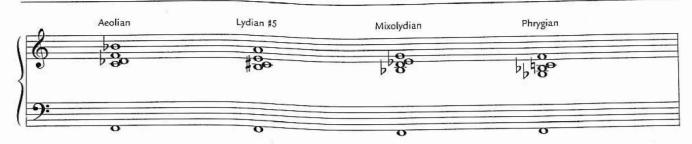
As one can see, as long as there is the four note limit, there are quite a few possibilities for tetrachord construction. This procedure can be of great use for the improvisor/composer for the instant creation of exotic "lines" while "blowing" over changes with relaxed harmonic rhythm – but this is a subject for another book.

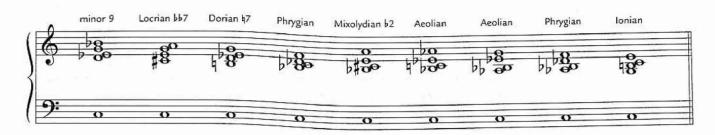
ADDITIONAL EXAMPLES

The following miscellaneous examples are included for further reference for ideas, examples to play at a keyboard, for ear training, or for clarification of concepts. A number of them were created by computer programs – and are still useful. The examples include common tone connection, both upper and root, symmetric patterns, and harmonizations. Within the examples are additional chord voicings for further study.

A. COMMON CHORD CONNECTION



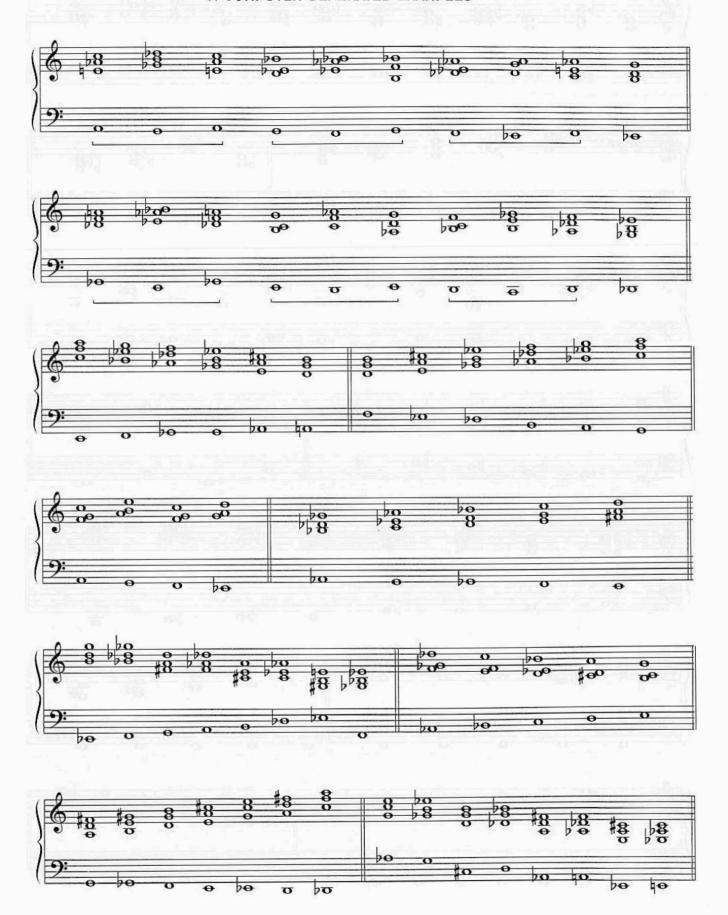




B. SYMMETRIC PATTERNS

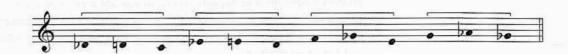


C. COMPUTER GENERATED EXAMPLES

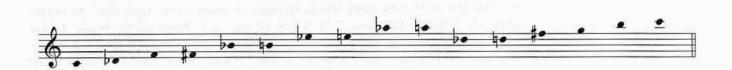


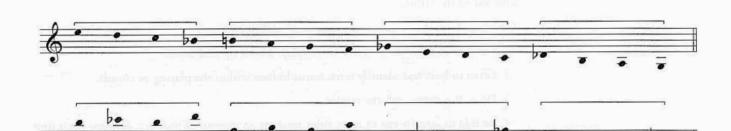


COMPUTER GENERATED PATTERNS









The American

EAR TRAINING GUIDE

It has been emphasized more than a few times that one cannot work creatively with chromatically related modal chords without first "hearing" them in a musical context. The student whose musical background or innate abilities show a weakness in the area of aural identification of modal chords can use this guide to ease the pain of what is a very difficult chore. There is no real shortcut to acquiring these aural skills – it is hard work, requiring hours of frustrating practice.

As a musician who acquired his knowledge and skills before there was a concept of jazz education, the author and others of his generation learned all they could by the "aural tradition" of listening to records, attending concerts or jazz clubs, constant "jamming" and badgering our peers and heros for information. The listening to records was not just for the inspiration they provided, but for all one could glean from them - they were the "textbooks" of our group, as they are to many of today's students. Because there was so little written information at that time, the aural identification of what was on those recordings was more than an enhancement of our skills, it was an absolute requirement to attaining any skills. Transcribing improvisations, or learning them by playing along with the recordings is one of the best ways to learn to play jazz. In the same way, one should transcribe compositions with all the correct chord voicings, melodies and bass and drum parts. This author can attest that the transcribing of three compositions changed his musical life: "Little One" by Herbie Hancock, "Filles de Kilimanjaro" by Wayne Shorter, and "Power to the People" by Joe Henderson. These compositions became available to the listening public in the middle to late '60s, when the author was writing tunes that showed an influence of Horace Silver, Thelonious Monk, and the compositions typical of those performed by Cannonball Adderley and the Jazz Messengers. It was very painful to transcribe so far above one's abilities - but truly worth the effort.

The plan of attack for improving your "ear" abilities follows:

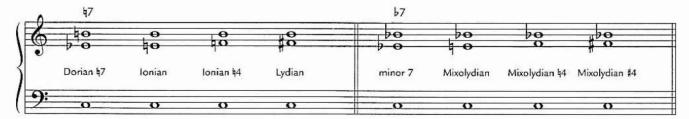
- 1. Learn to identify all the tetrachords played both up and down.
- 2. Learn to hear and identify tetrachords hidden within the playing of chords.
- 3. Do as the above with the modes.
- 4. Be able to identify the primary color tones as an interval of root to color tone. This first part will not be too difficult because of the amount of melodic ear training that is a part of one's early training.
- 5. Learn to identify the arpeggiated unaltered diatonic modal chords this, still a form of melodic ear training, shouldn't be too difficult.
- Try to hear the unaltered chords with three notes only: root, primary, and secondary color tones. Refer to the following guide.

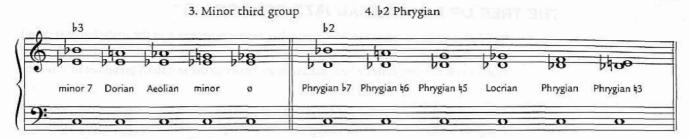
THE GUIDE

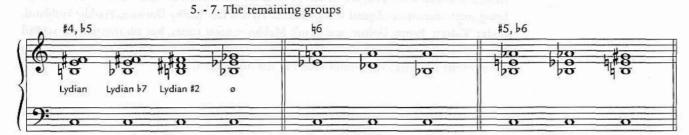
This is organized by categories of a primary color tone with its added secondary qualities. Once you learn the primary quality as an intervalic definition, add the secondary color tone.

1. Groups of \(\frac{1}{47} \) Ionian

2. Groups of b7 Mixolydian



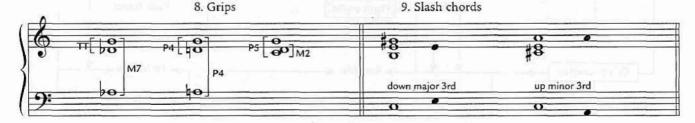




You can further organize the chords if you wish, maybe by groups of major thirds, all the altered types or all Lydians: Lydian, Lydian-augmented, Lydian #2, etc.

Moving on to full spacings, it is best to learn the chords by their composite sound and by their grip. When you hear a chord, your right hand should have a "feel" for what you are hearing. Learning the chords by their composite sound has no real shortcut – you must spend a lot of time in practice. Start by learning the voicings that are most commonly used; they are available within the pages of this book. If needed, practice with arpeggiations at first. In addition to "ear training" practice, much keyboard playing of the chords will be of benefit, particularly for the "grip" method of identification (see Example 8).

Slash chord identification can be learned by an intervalic method. As you will recall, the upper structure triad has a root as part of its construction; learn to identify the ratio of that root to the root of the chord (see Example 9).



Once you are fairly proficient with modal chord identification you should move on to the transcribing of full compositions, with full transcriptions of the chordal voicings.

An ultimate goal is to be able to identify everything that you hear and to be able to transcribe it to musical notation: all drum parts, bass parts, horns, voices, rhythmic figures, chord voicings, and timbral or instrumental assignments. The mature student should include identification of the players by style and sound. And for the meticulous, identification of makes of instruments, reed size and mouthpiece and even synthesizer makes and "patches"; in short, all you know and hear.

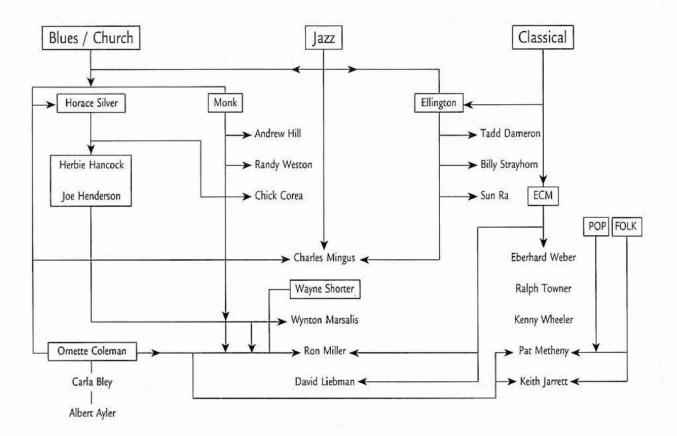
Your ear training should not just be in the academic environment or in the car listening to the stereo: while watching TV or movies, identify and, later transcribe the music - the film scorers have some great stuff. Try to transcribe Stravinsky or Gil Evans; go for all you hear.

Everyone has different abilities for aural identification, from those with perfect pitch to those whose listening background has been mostly "pop" harmony – but all can benefit from more ear training.

THE TREE OF INFLUENTIAL JAZZ COMPOSERS

The following is not meant to be a comprehensive representation of the evolution of jazz and its composers; it is meant to be a guide for the discography that follows. In addition, it emphasizes the composers whose materials are closer to the materials presented in this text-book.

The key word here is *influential* because most jazz musicians are composers. Yet, there are composers who, because of the strength of their compositional skills, have inspired others to write in a similar style. That is why some names are not included, names that once mentioned bring forth memories of great compositions. Names like Kenny Dorham, Freddie Hubbard, Cedar Walton, Benny Golson and Hank Mobley – great tunes, but no movements started because of them. So, using the following visual reference, try to hear the influences as you listen to the suggested recordings found in the discography.



DISCOGRAPHY/BIBLIOGRAPHY

RECORDINGS

The following, although not complete and not totally up to date, as there are so many new releases each month, are representative of the composer's works as advocated by this text. As mentioned early on in the text, knowing the music on these recordings is essential to mastery of the harmonic/compositional techniques presented. More than a cursory listening, the music must become a part of your inner being: it must change your musical life.

DUKE ELLINGTON

1. Masterpieces	by Ellington
-----------------	--------------

6. The Far East Suite

2. Ellington At Newport

7. And His Mother Called Him Bill

3. The Ellington Suites

8. New Orleans Suite

4. Afro Bossa

9. Anatomy Of A Murder

5. Such Sweet Thunder

WAYNE SHORTER

JOE HENDERSON

1. Night Dreamer

1. Power to the People

2. Speak No Evil

2. In Pursuit of Blackness

3. Etcetera

3. Page One

4. Adam's Apple

4. Inner Urge

5. Native Dancer

6. Atlantis

HERBIE HANCOCK

MILES DAVIS

1. Maiden Voyage

1. The Sorcerer

2. Speak Like a Child

2. My Funny Valentine

3. Crossings

3. ESP

HORACE SILVER

JAZZ MESSENGERS

1. Finger Poppin'

1. Ugetsu

2. Silver's Serenade

2. Jazz Corner of the World

THELONIOUS MONK

CHARLES MINGUS

1. Who's Afraid of the Big Band Monk

1. Barnaby Sessions

2. Live at the Five Spot

2. Ah Um

3. The Black Saint The Sinner Lady

CANNONBALL ADDERLEY

GIL EVANS / MILES DAVIS

1. Live in New York

1. Quiet Nights

2. Live in Japan

2. Miles + 12

3. Live in San Francisco

3. Individualism

EBERHARD WEBER

- 1. Yellow Fields
- 2. The Following Morning
- 3. Little Movements

RALPH TOWNER / OREGON

- 1. Solstice
- 2. Winter Light
- 3. Blue Sun

AVANT-GARDE

- 1. Paul Bley Barrage
- 2. Ornette Coleman Ornette on Tenor
- 3. Albert Ayler Ghosts
- 4. Sun Ra Heliocentric Worlds
- 5. Material Memory Serves
- 6. Laswell Baselines

MISCELLANEOUS

- 1. Keith Jarrett Belonging, Treasure Island
- 2. Jan Garbarek The Runes
- 3. McCoy Tyner Expansions, Tender Moments
- 4. Weather Report Weather Report
- 5. Joe Zawinul Zawinul
- 6. Kenny Wheeler Double, Double You
- 7. Dave Liebman Drum Ode
- 8. Joey Calderazzo In the Door
- 9. Andrew Hill Black Fire
- 10. Kenny Barron Golden Lotus

CLASSICAL LISTENING

The following sample selection should provide a good starting point for additional harmonic and melodic source material. Most of the non-idiomatic harmonic and melodic materials, as presented in this book, are derived from the listed sources. Romantic melodies are very much a part of the jazz language and these compositions also provide great examples of modal harmony, chord voicings, romantic harmony and, of course, the skills of the world's best composers.

It is suggested that you obtain the scores and read along with the recording, making notes of particular areas of interest. Like the jazz recordings, you should attempt to make these musical examples a permanent part of your inner self.

- 1. Tchaikovsky Romeo and Juliet
- 2. Rachmaninov Piano Concerto No. 2
- 3. Mendelssohn Songs Without Words
- 4. Rimsky Korsakov Scheherezade
- 5. Prokofiev Romeo and Juliet
- 6. Ravel Daphnis et Chloe
- 7. Ravel Valses Nobles et Sentimentales
- 8. Respighi Pines of Rome
- 9. Stravinsky Firebird
- 10. Stravinsky Symphony of Psalms
- 11. Messiaen Seven Haiku
- 12. Copland Rodeo
- 13. Wagner Tristan und Isolde
- 14. Stravinsky Pulcinella
- 15. Frank Violin Sonata in A

BOOKS

A. THEORY

- 1. Anything by Jerry Coker
- 2. The Jazz Theory Workbook by Mark Boling
- 3. Jazz Harmony by Andy Jaffe
- 4. Jazz Arranging and Composing A Linear Approach by Bill Dobbins
- 5. Changes Over Time The Evolution of Jazz Arranging by Fred Sturm
- 6. A Chromatic Approach to Jazz Harmony and Melody by David Liebman
- 7. Craft of Musical Composition Vol. 1 and 2 by Paul Hindemith
- 8. Contemporary Harmony by Ludmila Ulehla
- 9. All books by Gordon Delamont
- 10. Music Manuscript Techniques by Paul Harder
- 11. Twentieth Century Composition by Leon Dallin
- 12. Thesaurus of Scales & Symmetrical Patterns by Nicholas Slonimsky
- 13. The Jazz Composer's Companion by Gil Goldstein

B. HISTORY

- 1. Miles Davis by Ian Carr
- 2. Mingus by Brian Priestly
- 3. Jazz Styles by Mark Gridley

C. MISCELLANEOUS

- 1. The Music of Ron Miller
- 2. The Poetics of Music by Igor Stavinsky

ABOUT THE AUTHOR

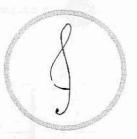
Ron Miller is a professor of jazz studies at the University of Miami. His areas of expertise are jazz composition, advanced improvisation, and jazz piano. He also directs the Monk-Mingus, Horace Silver, ECM and Avant-Garde ensembles.

Ron's compositions have been performed worldwide by many musicians including the faculty and students at the Jamey Aebersold clinics.

His compositions also have been recorded and/or performed by notable musicians such as Hal Galper, Red Rodney, "Elements," Ira Sullivan, and Stan Getz.

Composition students of Ron's that have attained notoriety include Pat Metheny, Steve Morse, "T" Lavitz, Bruce Hornsby, Gil Goldstein, Mark Egan, Matt Harris, Denis DiBlasio, and Rick Margitza.

arranging / composing / harmony / theory



MARK E. BOLING / EDITED BY JERRY COKER

The Jazz Theory Workbook

. ORDER No. 11201 (125 PAGE BOOK)

"The Jazz Theory Workbook" is a primer in jazz theory, intended to prepare the student for the serious study of jazz improvisation, arrangement and composition.

The focus is on the harmonic language of jazz, especially the harmonic practices which coalesced in the bebop and post bop periods of the 1940s and 1950s when bebop and standard tunes formed the core of the mainstream repertoire. The harmonic language of that period is still the framework on which contemporary jazz musicians build.

Included are many musical examples and written assignments for practice in the theoretical skills. Appropriate exercises are provided to reinforce theoretical concepts by immediate application to the instrument.

BILL DOBBINS

Jazz Arranging and Composing: a Linear Approach

. ORDER No. 11305 (BOOK W/CD)

Many different possibilities for harmonizing the same melody are illustrated and analysed, using techniques by such influential arrangers and composers as Duke Ellington, Billy Strayhorn, Oliver Nelson, Gil Evans and Clare Fischer.

_Techniques of melody harmonisation, linear writing and counterpoint for 2, 3, 4 and 5 horns.

_A chapter on writing for the rhythm section clearly illustrates the techniques commonly used by jazz arrangers and composers.

_Six complete scores in concert key are ideal for analysis, for playing the horn parts on the piano or for following the performances on the CD.

_An extensive chapter on form and development deals with extended compositional forms and the use of compositional techniques in writing for the small jazz ensemble.

_A useful discography is included at the end of each chapter.

"Jazz Arranging and Composing: a Linear Approach is a welcome and greatly needed addition to jazz educational literature. It is the first book to provide a clear and logical bridge from the more basic techniques of arranging and melody harmonisation to the more advanced linear methods employed by some of the most interesting and influential jazz arrangers and composers. The musical examples and scores are well organized and the analysis is clear and accessible. I have long known Bill's unique abilities as a gifted pianist and composer, and I highly recommend this most recent contribution to jazz writers at all levels of experience." (Clare Fischer)

GIL GOLDSTEIN

Jazz Composer's Companion

. ORDER No. 11304 (116 PAGE BOOK)

This book is divided into three main sections: Melody, Rhythm, and Harmony. Dozens musical examples as well as compositions by Bill Evans (pianist), Jaco Pastorious, Jim Hall, Ralph Towner, Steve Swallow, Pat Metheny, Michael Gibbs a.o. are included in order to illustrate specific compositional techniques. An extensive chapter on The Compositional Process features interviews with jazz composers Bill Evans, Carla Bley, George Russell, Horace Silver, Pat Metheny, Chick Corea, Lyle Mays, Anthony Davis, Herbie Hancock, Richie Beirach, Ralph Towner, a.o.

"Gil does a service here on a high level. The concepts he offers impose no style and thus, can be used and extended to enrich any musicians vocabulary. The rest is up to you." (Bill Evans)







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ANDY JAFFE

Jazz Harmony

ORDER NO. 11210 (CA. 200 PAGES)

2nd edition, completely revised and enlarged. 14 chapters including exercises and assignments: Intervals, Chords, Inversions, Modes; Diatonic And Modal Chord Progressions; The Blues; Lead Sheets; Song Forms and Melodic Variations; Secondary Dominant Chords; Substitute Dominant Seventh Chords and Tritone Subs; Minor Key Harmony; Modal Interchange and Minor Blues; Common Chord Progressions and Voice-Leading; Modulation; Pentatonics and Other Symmetric Scales; Blues Variations; Rhythm Changes; Coltrane's 3-Tonic System; Slash Chords and Hybrid Chord Voicings.

The first edition was one of the most widely used books on jazz harmony. For classroom and individual use

"Jazz Harmony is a brilliant addition to the field of jazz theory. It is well-written and beautifully organized, and the information it contains is thoroughly researched and authentically presented. I recommend it highly." (David Baher)



FRED STURM

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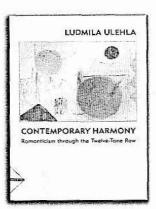
Changes Over Time: The Evolution of Jazz Arranging

• ORDER NO. 11350 (224 PAGE BOOK W/CD)

"Changes Over Time: The Evolution of Jazz Arranging" was conceived to illustrate, through comparative case studies, the dramatic development of rhythmic, melodic, harmonic, orchestrational, and structural variation in jazz arranging from the 1920s to the present. A broad category of compositions that have each inspired numerous jazz arrangements was established, and the arrangements associated with each of the original works were examined to determine the level of quality, the span of jazz history represented, and the number of renditions created by historically significant jazz arrangers, including Don Redman, Fletcher Henderson, Benny Carter, Duke Ellington, Billy Strayhorn, Gil Evans, Thad Jones, Bill Holman, Bob Brookmeyer, and Clare Fischer.

The case studies were narrowed to 35 arrangements of three classic jazz compositions and one American popular standard song: Jelly "Roll" Morton's King Porter Stomp, Don Redman's Chant of the Weed, Gerald Marks' and Seymour Simon's All Of Me, and Billy Strayhorn's Take The "A" Train.

Scores and/or parts representing nine decades were supplied by living arrangers, borrowed from collections, reconstructed from sketches, or transcribed from recordings. Four contemporary masters were ultimately commissioned to create new arrangements of four selected compositions.



LUDMILA ULEHLA

Contemporary Harmony – Romanticism through the 12-Tone Row

. ORDER No. 11400 (534 PAGE BOOK)

The understanding of the musical techniques of composition can not be reduced to a handbook of simplified rules. Music is complex and ever changing. It is the purpose of this book to trace the path of musical growth from the late Romantic period to the serial techniques of the contemporary composer. Through the detailed analysis of the musical characteristics that dominate a specific style of writing, a graduated plan is organized and presented here in the form of explanations and exercises. A new analytical method substitutes for the diatonic figured bass and makes exercises and the analysis of non-diatonic literature more manageable.

The explanations describing each technique are thorough. They are designed to help the teacher and the student see the many extenuating circumstances that affect a particular analytical decision. More important than a dogmatic decision on a particular key center or a root tone, for example, is the understanding of why such an underdeterminate condition may exist.

"I have used this book for analysis for teaching and as a creative tool in my own compositions. It is enormously useful and provocative." (Robert M. Abramson, The Juilliard School, New York)

"Contemporary Harmony is the only book that adequately treats contemporary compositional techniques as rhetorical expansions upon the past.one of the great analytical essays of our century." (Ron Thomas, pianist)

"Contemporary Harmony is one of the finest, most comprehensive texts ever written on the subject. A unique and invaluable contribution to both the student and the professional musician." (D. Anthony Ricigliano, Manhattan School of Music, New York)

RON MILLER



CONTENTS

	Introduction
CHAPTER	I: MELODY
7. 7m (2) = =	
	Melody Writing
	The Elements of a Melody
	A. Source Materials
	B. Theme and Development
	C. Melodic Contour
	D. Balance
	E. Point of Climax
	F. Melodic Form
	G. Melodic Rhythm
	H. Performance Directions
	1. Tessitura/Key
	Style
	Melodic Style Analysis
	Non-Romantic Melody Examples
	A. Idiomatic Angular
	B. Idiomatic Referential
	C. Idiomatic Programmatic
	Romantic Melodies
	Examples of the Use of Romantic Melody Writing
	Examples of Romantic/Melodic Jazz Compositions
	Conclusion of Chapter I
	Suggested Exercises
	Special Project: Folk Music Survey
	Melodic Analysis Reference Guide
	Recordings and Readings
	Recordings and Readings
CHAPTER	II: REHARMONIZATION
	Harmonization
	The Preplanned Method
	The Procedures
	Getting Started
	Harmonizing Given Melodies
	Reharmonization
	The Jazz Composer's Predicament
7.5	The Techniques
	Substitute Chords
	A. Diatonic Substitutions
	B. Chromatic Substitutions
	C. Style
	D. Harmonic Rhythm
	Reharmonization of Cadential Areas
	1. Cadences
	2. Cycles
	3. Turnarounds
	Substitute Symmetric Patterns
	Changing the Harmonic Rhythm of Non-Cadential Areas
	Arranging Techniques
	Reharmonization Examples
	Reworking The Melody
	Conclusion of Chapter II
	Suggested Exercises
	Recordings and Readings
	[1] - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -

CHAPTER III: PENTATONICS

	Pentatonic Compositions	
	Description and Definition	
	Kinds of Pentatonic Compositions	
	Pentatonic Melodies	
	Creating Pentatonic Source Scales	
	Symmetric Pentatonic Scales	
	Form and Style	
	Harmonization and Harmonic Rhythm	
	Chord Selection/Harmonic Rhythm	
	Composition Examples	
	Extant Melodies	
	Folk Influenced Compositions	
	Miscellaneous Pentatonic Compositions	
	Conclusion of Chapter III	
	Recordings and Readings	
	Conclusion and Final Comments	
APP	ENDICES	
	Appendix I	110
	Motific Development	
	Articulations and Effects	
	Appendix II	
	Tritone Substitution and Acoustics	
	Starting Chords - Standards	
	Additional Reharmonization - New Melodies	
	Appendix III	
	List of All Usable Pentatonic Scales	
	List of All Usable Modes	
	Language Listing	
	Miscellaneous Materials	
	Palm X, piano score	
	About the Author	1/1

INTRODUCTION

The goal of Volume 2 of Modal Jazz Composition and Harmony is to continue the dissemination of information that presents a path of study for the aspiring jazz composer. Where Volume 1 of the book emphasized the preparation of a modal harmonic foundation, this volume will introduce concepts of melody writing and a study of the styles of jazz compositions that are an intrinsic addition to the contemporary jazz composer's repertoire. Of interest to the composer/arranger will be the chapter on harmonization and reharmonization techniques, as many of the concepts presented reflect an influence of Gil Evans, Duke Ellington and Charles Mingus as well as those of Herbie Hancock. Additionally, much of the harmonic information of that chapter is based on the diatonic II-V system providing both an introduction to, and review of the subject.

Those interested in securing a new venue of expression will find the chapter on pentatonic tunes of particular interest. Although there are many extant pentatonic tunes available to the jazz performer, there are not many that are harmonized with a modern modal harmonic foundation excepting a few that have been contributed by Wayne Shorter.

As with Volume 1 of the book, an appendix with additional peripheral information is included for the student desiring theoretical explanation and additional examples. This volume will differ from Volume 1 by the inclusion of suggested recordings and readings at the end of each chapter with specific compositions for listening within the text. As usual, there are suggested assignments and exercises included at the end of each chapter.

Hopefully, having completed the study of the materials of both volumes of the book, the student will realize that the information is presented to form a holistic study. Having mastered the modal harmonic foundation of Volume I the student should next study melody writing concepts which can then be applied to the creation of melodies in a variety of styles. It is additionally important that the jazz and pop composer be able to write a romantic melody – the subject is covered at length in Chapter I.

Finally, the melody writing procedures are applied to the composing of pentatonic tunes, which are also harmonized with the harmonization techniques given in Chapter II.

To repeat from Volume 1, the author's basic intention is to provide information in the printed format that will expose and develop the student's latent creative abilities as well as allow him-/herself to unabashedly express a true love of music – and of course to fulfill that which he/she got into music for to begin with – have fun!

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Chapter I

MELODY

WORDS OR CONCEPTS TO KNOW

Folk/Art Spectrum

- 2 Melodic Elements
- 3 Tritonic/Tetratonic/Pentatonic
- 4 Harmonic Reference
- 5 Guidetones/Pivot point
- 6 Motific Development
- 7 Melodic Contour
- 8 Compression/Expansion
- 9 Melodic Balance
- 10 Melodic Rhythm
- 11 Melodic Cadence
- 12 Syncopation
- 13 Statement/Response
- 14 Antecedent/Consequential
- 15 Idiomatic Abstract
- 16 Idiomatic Programmatic
- 17 Romantic Ideal
- 18 Romantic Melodic
- 19 Binary Melody Form

MELODY WRITING

From a pedagogical point of view, melody writing is the most complex of the basic skills of the composer - there are many reasons why this is so.

Melody creation is the most personal of compositional activities and shows the least degree of success by the implementation of pedantic methods. Although there are "rules" given in traditional text books for ways of creating melodies, they in the long run tend to inhibit personal expression rather than promote free creativity. However, there are many methods for developing a melodic idea that when craftfully implemented, can develop even the most uninspired germ idea into a musical end product. The most usable pedagogical systems take this approach. Considering the enormous variety of melodic expression, it is understandable that most theorist/authors of significance tend to forgo a comprehensive presentation of melody writing procedures. As a point of reference, one of the suggested texts in Volume 1 of this book is *The Craft of Musical Composition* by Paul Hindemith. Of the 233 pages of the book, 28 are given to the discussion of melody writing with the remaining 205 pages devoted to concepts of harmony and acoustics. This one example is typical and understandable.

Since the emphasis of this book is on jazz composition, the problem is narrowed in its scope and workable guidelines for melody writing can be established. Another consideration which is certainly open to criticism is the belief that of the creative activities of the composer, melody writing is the one most dependent upon innate musical talent.

THE ROOTS OF MELODY CREATION

Music in general and melody creation specifically can be traced to a root expression of the human condition both as utterance (speech/singing) and body movement (dance/rhythm). As this primeval music evolved, the paths became more diverse with aspects of each taking a route that became further separated into paths which are now categorized in general as folk music and art music. Although each path has its ties to the original expression as speech or dance, art music shows a stronger connection to a vocal quality with folk music showing a predominant tie to body movement expression. This is certainly a generalization as there is art in dance and there are many art compositions that are based on a premise of rhythmic development; of course, many of these are ballet music.

Popular (folk) music in the same way incorporates the qualities that are associated with the seed development of art music: that of lyricism, romanticism and "seriousness."

JAZZ AND POPULAR MUSIC

Jazz is a music that evolved from popular music and has intrinsic ties to folk music, popular music being the contemporary form of folk music. Another way of describing the differences between art music and folk music is that folk music's creation, tradition and evolution is carried out by amateur or minimally trained musicians. The converse for art music is that its creators are highly trained and expend much of their life's energy on the study and production of music. Jazz since the 1950s has been evolving into an art music; this is in evidence by its drop in popularity from that time onward. With the development of jazz as an art music came the requirement of extensive serious study by the aspiring jazz musician – as any student reading this text will attest.

Although jazz has evolved to an art music level, its connection to folk music cannot be denied without the music losing its inherent passion or its lucent expressive and communicative qualities. Although jazz harmony has a direct reference to European art music, its rhythmic development and more importantly for this chapter, many of its melodic materials have strong and important ties to folk music. The most overt of these folk references are to the folk musics of Africa, Brazil and the British Isles. As jazz evolves and the world's cultures become more unified, there are and will be more overt references.

With the above in mind, the serious contemporary jazz composer needs to initiate a comprehensive study of the world's folk musics. One should pay particular attention to scalar source material, motific development, phrasing, and most importantly, the organization of a melody by its statement and response formulas. There are many additional elements of a melody that are to be considered and they will be given and discussed later in this chapter.

JAZZ AND ART MUSIC

As stated earlier, although jazz evolved from folk music, there are many examples where the melodic content of a jazz composition closely compares with that of an art music melody. At the point in time where jazz composition started its evolution toward becoming an art music, much of its compositional structure was based on the popular music of the time which we now call the "standard" repertoire. These song-form compositions were modeled on the art music of perhaps a century earlier: the Romantic era, and show a direct influence both harmonically and melodically of the music that is typical of Rachmaninoff and Tchaikovsky, to state obvious examples. In fact, many of the themes of these great composers, being "borrowed" by popular music's brigand producers became popular music themes - examples include "Strangers In Paradise," based on a theme from Borodin's "Polovetsian Dances," "This is My Beloved" and "Bangles, Baubles and Beads," both based on themes from the "String Quartet In D," again by Borodin. "Full Moon and Empty Arms," is almost a direct extraction of a main theme from Rachmaninoff's Piano Concerto No. 2. There are many more examples that can be cited based on the works of Tchaikovsky, Chopin and others. The point is that the expressions of the Romantic composers are very much a part of the jazz composer's lexicon as a result of jazz music's ties to the popular music of the 1930s through the 1950s.

THE SPECTRUM

The essence of the above is that the melodies of the world's cultures and for our interest, jazz melodies fall somewhere within a spectrum described by the peripheral limits of Art Music with romantic, lyrical melodies at one end point and single-pitched dance oriented melodies at the opposite. In addition, different phrases or sections of a melody can be described as being at opposite points of the spectrum, providing a clear sense of contrast and development. This concept will be discussed and illustrated in more detail later in the chapter.

STYLE

Referring particularly to jazz melody writing, the composer, when defining his melodic goals needs to clarify the general style of the intended melody. Style refers to the implementation of the elements of a melody to conform to an historic, ethnic or idiomatic description. In addition, the Style of a melody will predict its placement within the art/folk spectrum. To state all of the above concisely, the composer, whether creating a melody or analyzing an extant melody must consider in tandem the style of a melody as defined by an historic reference, an ethnic/folk reference, an idiomatic reference as to the melodic performance, and at what point in the art/folk spectrum the melody can be placed.

An historic reference refers to the creation of a melody that shows an application of the elements of melody writing in a way that conforms to the standard practice of a particular musical era. Contrasting examples would be the styles of contemporary pop ballads and hardbop melodies. An ethnic reference is to the creation of a melody following the scalar, phrasing and statement/response formulas peculiar to an ethnic source; basing a melody on a model of Japanese or Bulgarian folk melodies is typical. And lastly, devising a melody that is abstract, as well as one that takes advantage of the performance characteristics of a particular instrument, is an idiomatic approach to melody writing.

THE ELEMENTS OF A MELODY

The elements of a melody are comprised of the following groups: source materials, a means of creation and development, phrase organization, tessitura, contour and expressive devices. In addition, a goal and point of climax should be devised for each section or phrase of a melody.

A. SOURCE MATERIALS

Melodies may be based on any of the following sources:

- 1. Single notes
- 2. Tritonic scale fragments
- 3. Tetratonic scale fragments (tetrachords see Vol. 1)
- 4. Pentatonic scales
 - (a) diatonic
 - (b) altered
 - (c) add note (sextatonic)
 - (d) blues scales
- 5. Diatonic and altered diatonic modes (septatonic)
- 6. Symmetric scales
- 7. Harmonic references
 - (a) arpeggiations/guidetones
 - (b) common tones/pivot points
 - (c) leading tones/neighbor tones
- Ouotes
- 9. Non-western scales (octatonic and more)

A melodic source is the pitch organization of a motif, phrase, section, or any area of a melody that shows musical unity. A group of asymmetrically organized pitches numbering four or more in a scalar format can imply a modality and its perceived emotional quality (see Vol. 1, Chapter IV).

If an example is not scalar - having consecutive skips - in most cases it will have notes in common with a particular modality. It is possible that if the phrase is long enough, more than one scalar source can be detected. In addition, the modal quality of the motif or phrase can be enhanced or obscured by its relationship to the harmonic foundation of that particular area.

EXAMPLES OF MELODIC SOURCE MATERIALS

The following, like most of the examples found in the remainder of the book, are excerpts, of a length sufficient to illustrate the defined concept. To put the example in context, it is suggested the student refer to the recommended listenings and readings found at the end of the chapter as a source of scores and recordings for further study.

1. SINGLE NOTE

The starting point of the categories of melodic source materials, having no pitch comparison it is a melodic device in which the rhythmic development of the motif or phrase creates musical cohesion. Very effective in jazz melodies, it is a device that Horace Silver and Joe Henderson use extensively.

Example 1.1a: "Caribbean Fire Dance" (B section) by Joe Henderson



Example 1.1b: "Sweet Sweety Dee" (A section) by Horace Silver



2. TRITONIC

A 3-note scale fragment, it is the basic structure of the pentatonic scale. Primeval and pure, its use is found mostly in primitive and children's songs or in the more rhythmic sections of jazz compositions.

Example 1.2a: "Caribbean Fire Dance" (A section) by Joe Henderson



Example 1.2b: "The Girl From Ipanema" (A section) by Antonio Carlos Jobim



3. TETRATONIC OR TETRACHORDIC

A 4-note scale fragment long enough to imply a modality if the pitches are scalar (see Vol. 1, Chapter II).

Example 1.3a: "Rhapsodie Espagnole" by Maurice Ravel



Example 1.3b: "Firebird" by Igor Stravinsky



4. PENTATONIC

A 5-note scale constructed by the combination of two tritonic scale fragments. These scales will be covered in detail in Chapter III.

Example 1.4a: "Gibraltar" by Josef Zawinul



Example 1.4b: Symphony No. 6 (main theme) by Peter I. Tchaikovsky



5. DIATONIC AND ALTERED DIATONIC MODES

These are the most well known scalar sources and should need little explanation. Those not familiar with the altered diatonic modes should refer to Vol. 1 of this book.

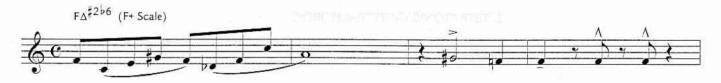
6. SYMMETRIC SCALES

Scales whose tone/semitone formulas show a pattern of symmetry. These are used primarily for effect or coloration due to their harmonic and melodic obscurity. Included in this group are the chromatic scale and materials derived by 12-tone techniques.

Example 1.5a: "Touchstone" by Ralph Towner



Example 1.5b: "Last Illusion" by Ron Miller



7. HARMONY REFERENCED MELODIES

Arpeggiations

This is an area of a melody that simply outlines part if not all of a particular chord or chords of a section of a composition. Only the most gifted of composers can use this device musically. Pianists and other chord oriented composers are at risk of overusing arpeggiation as a means of melody creation.

Example 1.6a: "Ask Me Now" by Thelonious Monk



Guide tones

This melodic source, based on the voice-leading of a particular harmonic movement is useful for obligato melodies but like arpeggiation, should be used with discretion for main melodies.

Common tones

Common-tone melodies consist of a single pitch found in common over a number of chord changes. Cadential in nature, they can be either sustained or have rhythmic development (see Vol. 1, p. 45).

Pivot Point

Pivot point refers to a common pitch that the melody returns to every few notes in a motif or phrase. A pivot point could be within or without the motific shape or phrase. Pivot point also affects a melody's shape or contour as will be described later.

Example 1.6b: "Prince of Darkness" by Wayne Shorter



Leading Tones and Neighbor Tones

These have harmonic inferences due to their resolution tendencies. A leading tone is the pitch a semitone below the targeted cadence pitch; a neighbor tone is usually a semitone above the cadence pitch but could also be a whole tone found either above or below. Their relevance will be given in later examples.

8. QUOTES/CLICHÉS

This refers to the use of extant material usually in the form of a motif or short phrase.

Quotes show a direct extraction from a documented source and are usually personalized by the subsequent composer.

Clichés can be quotes but are generally recognized as common melodic figures that are found in many melodies by many composers usually contained within a style category. Due to their reference to a style period and their overuse, they are considered clichés. Examples would include melodic figures that are found in abundance by many different composers of bebop melodies, fusion and pop melodies of a particular era, or of the melodic figures found in common to many hard bop tunes.

It will be pointed out in examples found later when quotes or clichés are found in the melody.

Example 1.7a: Scherzo No. 1 (ms. 16-17) by Frederic Chopin



Example 1.7b: "JC on the Land" by Ron Miller



Example 1.7c: "JC in the City" by Ron Miller



9. NON-WESTERN MELODIC SOURCES

These are scales whose octave divisions produce pitches that are not in conformance with the tempered tuning system. They are recommended as source materials for further investigation for the eclectic student. As most of these scalar sources are not playable by fixed pitch instruments, their use can be limited but are important nonetheless.

B. THEME AND DEVELOPMENT

The basic premise of a melody is the motif. A motif is the seed melodic creation that is subsequently given musical credence by any of the following means:

- · Repetition
- · Sequence
- · Inversion
- · Retrograde
- · Retrograde Inversion
- · Isorhythm
- · Isoarticulation
- Truncation/Extension
- · Displacement
- Mutation

The previous terms will be given further definition by their use in specific examples found later in all chapters of the book. For those who desire a review or a clarification of the terminology, there are definitions and examples on page 110 of the appendix. And for those whose backgrounds require a more complete study, there are suggested books at the end of this chapter.

It should be pointed out now that for all melodic analyzations found in this book, the main point of interest is in what the composer did to create the beautiful and classic melody that will be included in the following examples. Being overly detailed and scientific in an analysis is of less importance than getting to the core of the composer's creative and developmental efforts with sufficient understanding of the process to successfully affect our own efforts.

C. MELODIC CONTOUR

Contour refers to the "shape" of a melody whether describing its direction, its intervalic trend or its note values. Melodic contour is of particular importance to this chapter because of its clear definition of the emotional content of a melody. As will be shown later, a melody's shape will show changes that were derived either by a static or dynamic means.

The following are the elements of a melody that refer to its contour:

- 1. Direction
- 2. Interval
 - (a) diatonic
 - (b) chromatic
 - (c) skips
- 3. Note Value
 - (a) augmentation
 - (b) diminution
 - (c) compression
 - (d) expansion
 - (e) articulations
- 4. Balance

All of the above affect the emotional quality of a melody in tandem. Keep in mind that for the following descriptions, any melody has a number of the elements listed. As an example, the direction of a melody has certain qualities that are enhanced or softened depending on whether the melody is largely skips or steps in addition to its modal source, tessitura, rhythm and other elements.

1. DIRECTIONAL CONTOUR

In general, a phrase or section of a melody that has an upward movement will show an emphasis of the emotional descriptions of its elements: increased modal definition, increased tension, and enthusiasm.

In general, a phrase or section of a melody that has a downward movement will tend toward relaxation and finality or resolution. Although the modal quality of the melody is not affected significantly, the remaining elements tend to be de-emphasized.

2. INTERVALIC CONTOUR

In general, a phrase or section of a melody that is diatonic is the most defined by its modality and is relatively neutral in affecting the other elements of a melody. The other elements also have a less dramatic effect on diatonic melodies.

A phrase or section of a melody that is chromatic has increased tension and is darker with obscured modality.

A phrase or section of a melody that has skips of a P4 or more will strongly emphasize the other elements, will be very active, will induce tension and be very dramatic. Its modality will be somewhat obscured depending on its cadential pitches.

3. NOTE VALUE CONTOUR

A change in note values of a section or phrase has subtle emotional effects as well as a being a means of melodic and motific development. The note value change can be by either a static or a dynamic ratio. Of importance is the change in melodic rhythm relative to the pulse of the harmonic rhythm.

A static ratio is one in which all note values are changed by the same amount; a dynamic ratio has changing note values by increasing or decreasing amounts. The following, probably familiar to all is given purely as a form of review and to maintain a continuity of presentation.

Augmentation and diminution are examples of changing note values by a static ratio. Although they are traditionally listed under examples of motific development, they are included here because of their ability to affect an emotional change in the melody and as a point of comparison with compression and expansion.

Augmentation is the changing of the note values of a motif or phrase by increasing the amount uniformly. The emotional effect, although subtle, is of relaxation.

Diminution is the opposite, with the note values uniformly decreased causing a subtle increase in tension.

Example 1.8: Static Ratios



Compression and expansion are like the above but with the note value increased or decreased by a progressively changing amount. Both show a clear emotional effect and can also be a form of motific development.

Compression is the dynamic decrease of the note values of a phrase and shows an increase of tension with an emphasis of the effects of the other elements of a melody.

Example 1.9: "Seventh Sign" by Ron Miller



Expansion is the opposite of the above, it is the increase of the note values of a phrase by a dynamic amount. Its effect is that of relaxation and repose.

Example 1.10: "Kepler's Dream" by Ron Miller







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Articulations have the effect of changing note values although the note's placement in the melodic rhythm does not change. For instance, the alteration of a group of legato marked notes to staccato has an effect similar to diminution.

Examples and definitions of articulations are included in the appendix for further review.

D. BALANCE

Balance in a melody refers to the aesthetic requirement that a change take place whether in direction, intervalic quality, melodic rhythm or any of the elements of a melody that have been implemented for a length of time.

There are a number of rules given in traditional text books for balancing a melody – an example is that one should change direction after three consecutive skips. The problem with rules is that they aren't always applicable to a specific aesthetic requirement. It is better to look at melodies that stand the test of time and see how the composer solved any musical problems that may have occurred in that particular example.

Essentially, balance can be thought of as a means of working with tension and release. As stated above, most of the melodic devices are emotion affecting and there is a point where a melody as motif, phrase or section must change its direction, its rhythm, its modality or any of the remaining elements that have been in use for a time in order to allow a cathartic response from the listener. Libran in concept, balance exemplifies complimentary procedures – the *Yin* and *Yang* of melody writing.

The best way to create a balanced melody is by relying upon ones intuitive skills when making the decisions that determine the aesthetic result. Also, how a melody is balanced, at the basic motific level, to the overall form, is the most important concept to consider and understand when analyzing a given melody.

Statement and response is an example of the use of balance with the response being the release of the statement. The same can be said of antecedent and consequential phrasing. The concept of balance is essential to all the aesthetic aspects of composition: harmonic rhythm, modal contour, rhythmic development and of course, melodic materials.

The levels of melodic balance are from the smallest, the motif, to the total form. It is with melodic rhythm that well thought-out balance is most critical. As we will see in subsequent examples, if a motif begins with fast melodic rhythm, it should be balanced with a contrasting slow response to its cadence point – phrases should be treated the same way.

E. POINT OF CLIMAX

There is a point in the melodic contour where the emotional intensity is at its peak, usually about 4/5 through the composition. There are mathematical formulae to plot where this point should be but it is recommended that the composer determine the point of climax by relying on listening experience and intuitive skills. The point of climax and its subsequent release could be considered the grand statement and response of the composition and the ultimate balancing of the compositional form. Point of climax will be discussed more in the analysis of melodies to come later in the chapter.

F. MELODIC FORM

1. STATEMENT AND RESPONSE

Along with the phrase quality of a jazz melody, the most important aspect is its use of statement and response. With evolutionary ties to African folk music, phrasing a melody by a call and response formula, whether in a jazz composition or an improvisation, indicates a clear sense of melodic development while maintaining a placement of the melody at a point towards folk area of the folk/art spectrum. Additionally, it provides an effective means of balancing a motif.

Of course, this technique is not important only for jazz compositions; its use will show clear development in any melody whether pure folk or pure art in its description. Statement and response will be further defined by its extensive use in the many examples that will follow in all chapters of the book.

2. PHRASE QUALITY

The main interest in the phrase qualities of the melodies in this book will include the descriptions of their symmetry: whether the composition or a section of it shows a phrase organization that is symmetric or asymmetric; and if there is phrase balance by the use of antecedent/consequential organization. Usually there is a correlation between a composition's harmonic style, its harmonic rhythm and its melodic phrasing. Song form and plateau modal compositions tend to have symmetric phrasing, with vertical modal, linear modal and through-composed forms having asymmetric phrasing (see Vol. 1, Chapter I).

Certainly one may find exceptions to this, and the mixing and contrasting of melodic and harmonic styles may be a method of creating uniqueness in a composition. Overall, a melody's phrase quality will be relative to its position in the folk/art spectrum with the harmonic content having a quality of its own.

Most of the melodies that will be analyzed in this book will show a symmetry of phrasing because of the kinds of compositions and their harmonic materials that are the emphasis of this volume. More will be said regarding symmetric phrasing at that time.

Melodies with asymmetric phrasing usually do not show a use of antecedent/consequential organization and in general are vocal, melismatic, and have a through composed quality – all descriptions of a linear melodic style.

G. MELODIC RHYTHM

1. TEMPO

Melodic tempo refers to how fast or slow the pitches of a melody change relative to the harmonic rhythm. Melodic tempo is one of the style defining elements whether historic or harmonic. As an example, many bluegrass, country and Irish folk melodies have extended 8th note phrases over relatively slow harmonic rhythm or a single chord (hornpipe), demonstrating their common ties.

As with previous descriptions, there can be a diversity of melodic tempi within a composition with perhaps a fast moving melody for the A sections and contrasting slow melodic rhythm in the B section. It all comes down to the importance of the concept of balance, variety, and contour in all aspects of the compositional process. Due to its musical importance, balance will be referred to repeatedly in this text.

2. CADENCE

Melodic cadence is defined as the point where the melodic movement comes to a stop, either by sustaining the last note or by simply ending the motif or phrase and filling the rest of the section with a rest. Working in accordance with melodic and harmonic tension and release, melodic cadence is the punctuation point of motific and phrase organization.

The chosen pitch for the cadence point can affect the overall style of the phrase or section as well as the modal definition and resolution quality. The following order of cadence note choices is from the most relaxed to most tense. Orders of modal definition can be found on various pages of Volume 1.

ORDER OF CADENTIAL NOTE CHOICES

Relaxed Root

P5 (perfect fifth)
M3 (major third)

3 (minor third)
M6 (major sixth)

6 (#5) minor sixth, sharp fifth)
M2 (major second)
m2 (minor second)
M7 (major seventh)

7 (minor seventh)
P4 (perfect fourth)

Tense #4 (b5)

As an example, if the modality of the phrase were Ionian, the most relaxed note choices would include the root, 5th and 3rd with the M7 or P4 having the most modal definition. Were the phrase in the Phrygian mode, b2 would have the most modal definition with the root or the fifth being the most cadential. There is much to consider when selecting a cadence note pitch and the best guide is probably to let the melodic voice-leading take precedence in note selection.

3. CADENCE NOTE DURATION

A cadence note's duration can be used in a way that compliments the modality of the harmonic foundation of a section. For instance, the compositions "Maiden Voyage" (Herbie Hancock), "Follow Your Heart" (John McLaughlin) and "JC on the Land" (Ron Miller) are compositions based largely on Mixolydian sus4 chords. Listening to these will reveal that their melodies are balanced with active, terse melodic statements followed by sustained cadential notes – melodic devices that compliment the qualities of the Mixolydian mode.

In addition to using long-held cadence notes to compliment a modality, they work well as common-tone pivot points that connect a group of chords and focus the listener's attention to the harmonic movement of the composition.

As a form of melodic and harmonic balance, long held cadence point pitches are particularly affective. Usually, there is active melodic material which sets up a degree of tension which is effectively released by the held cadence pitch. Wayne Shorter is a master of this concept and uses it quite often in a variety of his compositions from the earliest to his most recent. One recording that has many clear examples is *Speak No Evil*.

Example1.11a: "Speak No Evil" (ms. 9-13) by Wayne Shorter



Example1.11b: "JC on the Land" by Ron Miller



4. SYNCOPATION

Melodies that cadence often on weak (up) beats are aggressive and active, and if the motifs are constructed so that most of their pitches fall on weak beats, the effect is enhanced. Syncopation is the term to describe that quality. Melodies that cadence on or have motific constructions that start on strong (down) beats, conversely are relaxed and passive. With that in mind, there is more to consider when working on the emotional goals of a melody. In addition, the use or non-use of syncopation is another *style* description.

5. RIFFS AND "LICKS"

A riff is a short melodic idea that has rhythmic identity. Usually based on a tritonic or tetratonic source, it is repeated a number of times emphasizing its rhythmic quality. Riffs are a good example of an African folk influence in jazz melody writing.

Licks are similar to riffs but with more emphasis on the technique or performance requirements of the melodic figure. Licks are also style definitive and often are quotes, taken from documented or recorded improvisations.

H. PERFORMANCE DIRECTIONS

One of the more overlooked melodic descriptions is the inclusion of performance directions in the form of expression markings: articulations, dynamics, effects and breathing cues. It is these interpretive directions that give a melody a dynamic quality.

Fortunately, the language of jazz interpretation is learned largely aurally and in most cases a jazz melody will be performed as intended by the composer without performance directions – provided that the performer "grew up" with that particular style. To assure that there are no interpretive problems, it is suggested that the composer include complete expressive directions with all his melodies.

A listing of expressive directives includes:

- Articulations
- Dynamics
- Effects
- · Sound support phrasing
- · Tempo markings

Definitions and examples of the above terms are included on page 113 in the appendix for review and clarification.

I. TESSITURA/KEY

One last subject to be mentioned before going on to style and melodic analysis is the quality a melody has due to its tessitura and its key center. Due to the laws of acoustics, melodies whose general range fall low in the grand staff tend to sound "darker," "heavier," and more ambiguous than those found in a median or high area. The opposite, those melodies with tessiturae found high in the grand staff tend to sound "bright," clear and thin. In addition, there are those who believe that melodies that are centered in the "sharp" keys sound brighter than those found in the "flat" keys. This is a good subject to discuss over a few beers as it is subjective and probably has no documented proof of its reality. One can possibly find some examples that may work on stringed instruments whose strings are tuned to "sharp" pitches (E, A, D, G) as the open strings will respond to "sharp" keyed pitches by resonance (sympathetic vibrations). The sharp/flat key controversy will be found again in Chapter II.

STYLE

The styles of jazz melodies can be categorized into two main groups:

ROMANTIC

Jazz ballads, bossa novas, boleros and some medium and fast tempo songs have melodies that are constructed following the developmental procedures that have come from the melodic style of Tchaikovsky and Rachmaninoff by way of the popular music composers of the 20s to the 50s. Included are the efforts of expert film composers from the earliest to contemporary times. With this in mind, it is very important that the jazz composer as well as those aspiring to compose for the popular market: CDs, radio, television and films, be able to compose a romantic melody.

IDIOMATIC

These jazz melodies are constructed to conform to particular qualities that are defined by an historic era: bebop, swing, Dixieland, hardbop; a folk/ethnic reference: blues, Caribbean, pentatonic, pop; or by the performance peculiarities of an instrument or voice. Melodies can also be described by any noteworthy use of the elements: angular, lyrical, programmatic, symmetric, tetrachordic, or any of the others.

THE GENERAL MELODIC STYLE CATEGORIES

Romantic/Ideal: these melodies/compositions are based on the Romantic period philosophically, melodically and to some degree, harmonically.

Romantic/Melodic: these melodies show consistencies with romantic melody writing procedures but differ in philosophy, harmonic materials and emotional goals.

Idiomatic/Referential: modeled on the melodic descriptions of a style era, folk reference or instrument/voice performance characteristics.

Idiomatic/Abstract: these melodies are constructed to have a quality described as jagged, smooth, consonant, chromatic and similar depictions.

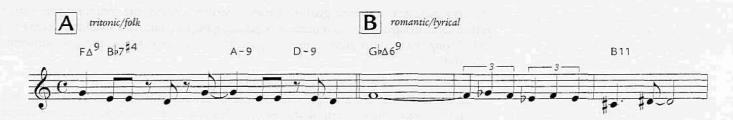
Idiomatic/Programmatic: the construction of a melody to define an emotional, modal or programmatic goal: pastoral, energetic, dark, mysterious and so forth.

In the main, jazz melodies are either romantic or non-romantic. The non-romantic melodies are so diverse - having so many variables in their descriptions - that a comprehensive representation of how the elements of melody writing were to be applied for each would be beyond the scope of this book. In addition, there are many melodies that have mixed influences: folk/modal, riff/pentatonic, and many more.

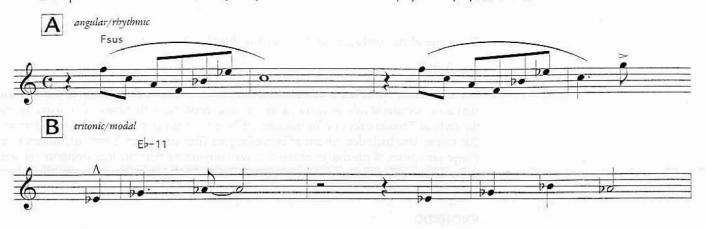
Another point to consider is that many compositions have different styles of melodies in different sections. Some examples are:

SONG SECTION STYLE - Contrasted and Combined Melodic Styles

Example 1.12a: "The Girl from Ipanema" (excerpts from A and B sections) by Antonio Carlos Jobim



Example 1.12b: "Passion Dance" (excerpts from A and B sections) by McCoy Tyner



Example 1.12c: "Hoe Down" (excerpts from A and B sections) by Oliver Nelson



Add to that the fact that many jazz melodies have contrasting harmonic styles and form, it should become clear why the study of melody writing is as difficult as it seems and requires many years of study, listening and playing experience. It is the diversity and overwhelmingly comprehensive variety of melodic combinations that makes the task seem formidable.

The approach to be taken for the remainder of the chapter is that of forming a method or a guide to follow that will establish a means for research and analysis of existing melodies that can serve as models for one's own melodic goals, along with the actual analysis of existing melodies. Additional melodic analysis will be found in each subsequent chapter of this book along with harmonic and formal analysis. The covert premise for all of Volume 2 of this book is in fact melody writing.

MELODIC STYLE ANALYSIS

Having established a stylistic goal for a melody writing project, the composer may want to gather some insights into the means of organizing the elements of a melody to define that style. Using the analysis guide found on page 40 of this book, follow these recommended procedures:

- · Transcribe or refer to documented examples representing the stylistic goal.
- Listen to or play the example making note of the emotional quality of the melody by sections. Plot where you think the melody of each section falls on the folk/art spectrum.
- · Using the analysis guide, analyze at least two examples.
- · List any consistencies between the examples.
- Listen again and assimilate the melodies and their stylistic qualities.

Although the main point of interest in this chapter is melody writing, to understand a style definition, all the elements of a composition must be looked at simultaneously.

Analysis: hardbop style, including melody, harmony, rhythm and form.

Typical Songs:

"On the Ginza" by Wayne Shorter and "Nineteen Bars" by Horace Silver

Both compositions show use of the following:

A. FOLK REFERENCES

- 1. African
 - (a) statement and response
 - (b) blues riffs and pentatonic scales
 - (c) aggressive Afro/Latin rhythmic concepts
 - (d) riff motifs and figures
- 2. Western European Reference
 - (a) modality (melodic and harmonic)
 - (b) diatonic harmony
 - (c) diversity and contrast of harmonic rhythm
 - (e) drama extremes of tessitura and dynamics

B. HISTORIC REFERENCE

- 1. Bebop roots
 - (a) swing rhythmic conception
 - (b) "front line" horn sound
 - (c) some melodic style reference
- 2. Big band
 - (a) form and development
 - (b) predominant "brass" sound
 - (c) arrangements: backgrounds, "shouts," tutti sections

CONCLUSIONS

Intrinsically bebop in reference, hardbop differs by the conscious striving for high drama and excitement by extreme contrasts of dynamics, harmonic rhythm and rhythmic styles within the composition: shifts from swing to Afro/Latin to shuffle and back. Additionally, There is extensive use of riffs, "kicks," breaks, and rhythmic motifs and figures played tutti.

Hardbop shows evolutionary significance by the extensive use of modality and contrasts of harmonic rhythm.

(See "Repose/Transition" in Vol. 1 and last question on p. 14.)

Like bebop, hardbop shows a departure from jazz performance as dance music or as a music whose purpose is to "serve" the customer. Hardbop is jazz with aspirations toward "art." It is still entertaining, but under the composer/performer's set of rules rather than the customer's.

Of particular interest is hardbop's use of rhythmic and melodic materials and approaches associated with the folk area of the art/folk spectrum while referring to European art music with its harmonic materials.

For the remainder of the chapter, we will look at a number of melodies in their entirety. Starting off with three examples of idiomatic (non-romantic) melodies of varying degrees of diversity; and because of their importance, the procedures for writing romantic melodies will be emphasized for the later part of the chapter with more specific non-romantic styles covered in later chapters.

NON-ROMANTIC MELODY EXAMPLES

Of the following examples, as with previous excerpts, only the most salient points will be listed. It is suggested that the student, using the analysis guide found on page 40 do a subsequent comprehensive analysis as time allows.

A. IDIOMATIC ANGULAR

Example 1.13a: "One Up and Down" (ms. 1-2) by Eric Dolphy, from Out to Lunch, Blue Note 84163



This melody is clearly angular and non-romantic. It starts off with a blues based motif defined by the downward skip from the \$3 to the P5, balanced by an upward leap of a tritone to the \$2 of the key. The accent on the second beat (the backbeat) additionally is blues oriented.

Example 1.13a: "One Up and Down" (ms. 3-5) by Eric Dolphy, from Out to Lunch, Blue Note 84163



The next three measures, intervalically angular and rhythmically quirky, set the general tone of the melody. Very chromatic, tense intervalic skips and disjointed melodic rhythm suggest that Eric was influenced by a 12-tone technique shaped by a blues scale when organizing this melody.

The last measure, very tense by intervalic skips and cadential note choices is finally balanced out by the final cadential resolution to the tonic; the last three pitches being an arpeggiation of a G7#4 chord.

B. IDIOMATIC REFERENTIAL

Example 1.14a: "Caribbean Fire Dance" (ms. 1-4) by Joe Henderson



The first four measures provide a great example of the primitive qualities a melody can have when based on a tritonic source. Having only three pitches, the melody must be developed rhythmically – as this one does. There is clear statement and response, with much use of syncopation. Relative to the roots, the cadence pitches define Eb Lydian modality.

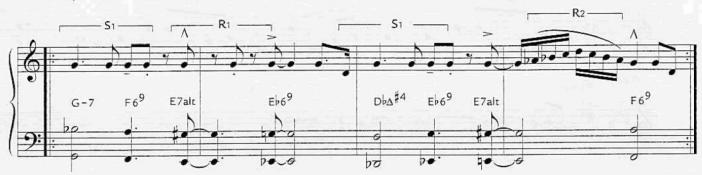
Notice the effect of metric compression by the eighth note shift to the left of the response. Of note also is the inclusion of the C‡ non-harmonic tone (nonmodal to E♭ Lydian). Joe uses this tension inducing device often and it is found in most of his melodies.

Example 1.14b: "Caribbean Fire Dance" (ms. 5-8) by Joe Henderson



The remaining four measures of the first section balance out the first four as a consequential phrase. Of note is the compression of the phrase by the shifting of the cadence points in the form of hemiola. The occurrence of the last cadence point on the fourth beat of the seventh measure followed by silence (a break) induces a great deal of tension which is resolved by the pickup on beat four of the last measure of this section. Compare this with the 7th and 8th bars of "Speak No Evil" and many other melodies by Wayne Shorter.

Example 1.14c: "Caribbean Fire Dance" (ms. 9-12) by Joe Henderson



Most significant in the 4-bar bridge is the use of a single pitch as a melodic source developed rhythmically for the first three measures. The balancing of the section with a compressed Phrygian tetrachord in the last measure is particularly effective. The statement/response organization of this section is similar to many blues tunes with a statement, a response, a repeat of the first statement and then a new second response. (S1, R1, S1, R2)

The combination of the simplicity of tritonic and single-note melodic source as well as the implied pentatonic quality of tritonics organized rhythmically produces a dance-like quality that defines this melody as idiomatic folk.

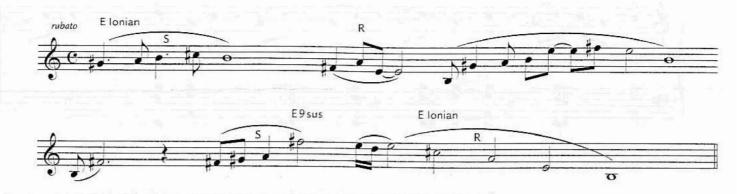
C. IDIOMATIC PROGRAMMATIC

The programmatic intent of the next melody (Example 1.15) is to create a relaxed pastoral setting. Influenced by Austrian folk music, this Ionian linear modal composition accomplishes its goal by:

- The overall melody excepting one pitch is based on E Ionian.
- Most motifs and phrases start and cadence on pitches that either clearly define Ionian or are cadentially complete due to their consonance (see p. 20).
- Relaxed melodic rhythm and relaxed linear modal harmonic rhythm. (see p. 13, Vol. 1)
- · Use of statement and response along with asymmetric, melismatic phrasing.
- · The melody has a relaxed median tessitura.
- · Balanced contrasts in direction.

• A clear final cadence includes: downward direction, expansion of intervals by skips, starting on the E, a m3 down to C#, a M3 down to A, a P4 down to E, and finally, a P5 down to the cadence pitch of B. Notice that an A triad is outlined for further consonance.

Example 1.15: "In a Silent Way" by Josef Zawinul



Example 1.16: "American Hope" by Ron Miller





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This composition, like the previous one, is programmatic and influenced by the qualities of folk music, In this case, the influence is American folk/pop as the following points will attempt to reveal. In addition, the composition is an another example of Ionian linear modal, providing a point of comparison.

Comments and salient points include:

- A non-harmonic pickup (C#) to bar 1 is found also in bar 9. Compare it to the use of NH tones by Joe Henderson (ex. 1.14) and Tchaikovsky (Ex. 1.20). In addition, the motif is a quote, taken from Gershwin's "Prelude No. 1."
- A G minor chordal outlined opening statement is balanced by a response which cadences on a consonant held pitch. Compare this with the cadence points in the previous example "In A Silent Way."
- Found in bars 9-16 is a metric shift to the right and a compression of the opening statement, with new material in its response (S1-R1, S1-R2).
- · The motif in bar 13 is an extant folk/pop cliché.
- Part II of the melody (bars 16-29) is based on a C minor pentatonic source, further defining the composition's folk qualities.
- Bars 17 and 18 include a tritonic statement which is responded by a tritonic folk/pop cliché in a contrasting direction.
- There is increased rhythmic activity and typical pentatonic melody treatment in bars 20-22.
- More folk/pop extant material in bars 25-27.
- Examples of held cadence pitches over Mixolydian sus4 chords are found in bars 29-31, 33-35, 37-39, and 43-45.
- The goal of the heightened rhythmic activity along with the chromaticism of bars 41 and 42 is to significantly increase the melody's tension to emphasize a clear and final cadence pitch.

The use of a consonant (5th of the home key) cadence pitch (bars 47-50), further defines the cadence's finality and is definitive of Ionian Linear Modal melodies. Notice that excepting for the aforementioned NH tones and the short bit of chromatic material found in bars 41 and 42, the melodic source of the melody is generally diatonic to Eb Ionian. The melody performed monophonically should define Eb Ionian and be relaxed and peaceful, as Ionian is intended.

Other points of importance would include the melody's tessitura, motific development, melodic form, general melodic rhythm, and specific melodic rhythm just prior to cadence points. Investigate these points.

ROMANTIC MELODIES

One usually associates romanticism in music with the general era known as the Romantic Period (ca. 1800-1900) and its associated composers. Although that era and its composers epitomize our perception of romanticism in music, it should be pointed out that romanticism as described in this book refers to a style of melody writing that can be found in the works of Bach, Mozart, Ellington, Jarrett and Shorter as well as Tchaikovsky and Rachmaninoff. Fortunately, the qualities that define a romantic melodic style are easy to implement into a pedantic formula.

In order to better clarify the goals of a romantic melody writing project, a brief description of romanticism is in order. Romanticism is not merely a musical style period but is an aesthetic "point of view;" a measure of the degree of expressiveness found in any of the forms of human endeavor including the arts as well as day-to-day existence. As an expression, Romanticism is easily recognized in the works of writers, visual artists, dramatists, philosophers and composers having that "point of view" or of being of the Romantic period. To fully grasp the general definitions of romanticism, it is suggested that the student, if not already having done so, study and experience the works of the Romanticists in all areas of endeavor. Listed not by time period but by similarities in intensities of expression, a partial listing includes the writers Poe, Twain, Hawthorne, Goethe, Shelley, Melville, Coleridge, and Byron and the painters Kokoschka, C.D. Friedrich, Derain, Van Gogh, Delacroix and Matisse. Not including drama and dance, it is still quite an undertaking – but is a strongly recommended regimen of study for the aspiring composer.

Descriptions of the works of the romanticists and romanticism in general include:

- A contrived intent of drama (melodrama)
- · A degree of pretentiousness
- · Exaggerated expressiveness
- Seriousness
- · Overly emotional/sentimental/personal
- · A striving, yearning quality
- · Enraptured, beautiful, programmatic
- · A quest for the ideal; the infinite

Depending on the listener's background and musical tastes, the traits of romantic music could be interpreted as beautiful, lyrical, ideal and perfect or contrarily could be thought of as simplistic, pedestrian, overdone, trite or "corny." Unfortunately, due to the caricaturization of the elements of romantic music in film scores, many agree with the later descriptions. The author has had both points of view and at the time of this writing is convinced that romantic melodies are the most beautiful and most sorely needed in today's music.

The following is a listing obtained by a careful comparison of a number of romantic melodies from all eras as to how the elements of a melody are worked to create a melody whose main goals are to dramatize, to overly express and to create a sense of striving for the ideal.

Found in romantic melodies are the use of:

- Many upward skips (some downward) of a major or minor sixth. These skips are very dramatic and are traditionally known as the "heroic leap" or the "romantic sixth." Keep in mind that they are consonant intervals and singable.
- 2. Other intervalic skips both up or down for various degrees of tension and dramatic effect.
- 3. Final cadence pitches usually are consonant, the general intervalic quality is lyrical.
- 4. Use of melodic chromaticism as a tension inducing device, or as non-harmonic tones to emphasize emotional expression or to enhance cadential resolution (see No. 7).
- 5. Balanced three part motifs with statements having slow melodic rhythm contrasted by a response with fast melodic rhythm which then becomes slow again at the cadence. Also, there are many examples of truncated versions of the above: fast statements followed by a slow, or delayed cadence.
- 6. In general, many repeated notes.
- 7. In particular, many repeated notes that become non-harmonic tones that are sustained and then resolved at the appropriate emotional "moment." Their direction of resolution is dependent on the directional contour of the melody prior to the non-harmonic tone

or on the cadential quality of the tone. Usually, but not always, non-harmonic tones found in cadential resolutions go downward and non-harmonic tones found in motific statements go upward.

8. Simple binary form:

Part 1 - an exposition section showing predominant use of simple diatonic motific statement and development with themes clearly presented.

Part 2 - extensive use of repeated phrases or sequences usually developing upward to attain a sense of longing for the ideal. This is the most dramatic, emotionally fervent portion of the melody; all the expressive effects are used to the maximum.

Note that romantic melodies and compositions can range from being light and happy in tone to dark and melancholic. Other romantic defining devices include the use of 3/4 meter and the often found 66 pitch at key cadential points.

The following examples are short excerpts of melodies from diverse sources and dispare eras which still have many romantic melody writing concepts in common. In addition, most of the examples have a number of the above listed descriptions of romantic melody writing techniques implemented in tandem.

EXAMPLES OF THE USE OF ROMANTIC MELODY WRITING

Note that in the following excerpts (excepting the jazz tunes) and all remaining examples in this chapter, the original harmonic material has been changed by utilizing the reharmonization techniques that will be given in Chapter II. You may find that by doing so, many of the works from the classical repertoire can be performed in a jazz/pop setting.

Example 1.17a: "Prayer" by Keith Jarrett (Intervalic Skips)

(romantic/idiomatic)

G-9

C-9

G-9

C-9

Measure 3 has an upward skip of a m6, in addition, there are three repeated notes. Note the balanced melodic rhythm.

Example 1.17b: "Where Do I Begin" by C. Sigman



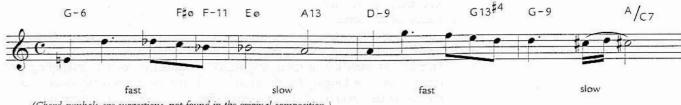
This excerpt has both downward and upward skips of a m6 in measures 1 and 2, many repeated notes and an upward leap of a M6 (romantic 6th) in measure 3.

Example 1.17c: "American Dirge" by Ron Miller



Measure 1 has a downward m6, measure 2 an upward M6.

Example 1.17d: A Theme from "Samson and Delilah" by Camille Saint Saëns

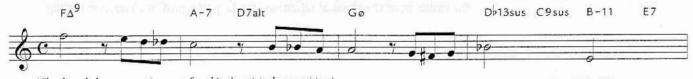


(Chord symbols are suggestions, not found in the original composition.)

This example has many romantic devices:

- An upward skip of a m7, in measure 1 and 3, it is more tense than the skips in the previous examples.
- · Use of chromaticism in measure 1 and 3.
- Repeated notes that become a non-harmonic tone which resolves downward found both in measures 1 and 2, and 3 and 4.
- · A slowing down of the melodic rhythm at cadence points.
- And lastly, although an incomplete example, it starts to show the typical development
 of part two of the melodic form in which multiple repetitions of phrases or motifs in an
 upward trend created a sense of yearning for the infinite.

Example 1.18a: A Theme from "Samson and Delilah" by Camille Saint-Saëns (Melodic Chromaticism)



(Chord symbols are suggestions, not found in the original composition.)

As introduced in example 1.17d of the previous examples, the use of chromaticism in measures 1-3 creates an emotionalism desired in romantic melodies.

Example 1.18b: "Prelude to a Kiss" by Duke Ellington



From a contrasting source, again chromaticism for emotional effect:

Example 1.19a: "May Breezes" by Felix Mendelssohn-Bartholdy from "Songs Without Words"



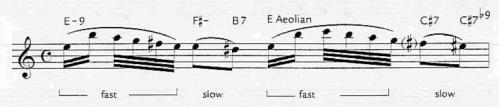
As labeled in the excerpt, it has a symmetric balance of contrasting melodic rhythms. The fast rhythm prior to the cadence emphasizes the cadential effect. There is in addition, an example of a repeated tone becoming a non-harmonic tone that in this case resolves up to the cadence pitch.

Example 1.19b: "Ana Maria" by Wayne Shorter



From a contrasting source, balanced melodic rhythm with the cadence resolving downward.

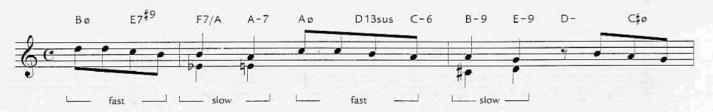
Example 1.19c: Adagio in B minor by Wolfgang Amadeus Mozart



(Chord symbols are suggestions, not found in the original composition.)

Illustrating the diversity of romantic melody sources and that they are not tied to a specific time period, this excerpt is clearly romantic as is the whole piece. Compare it directly to the Mendelssohn and Saint Saëns melodies then consult a music history text for the working time periods of these composers. In addition to balanced and contrasting melodic rhythm, there are repeated notes that become non-harmonic tones which resolve downward – overt romantic melody writing techniques.

Example 1.19d: Theme from Symphony No. 6 by Peter I. Tchaikovsky



(Chord symbols are suggestions, not found in the original composition.)

The theme from Tchaikovsky's Symphony No. 6 ("Pathétique") is another example which demonstrates the use of a number of the previously listed romantic melody concepts.

THE PROTOTYPICAL ROMANTIC/IDEAL MELODY

The following melody is a perfect example to be referred to for a complete understanding of the concepts of romantic melody writing. It has most of the previously given techniques used in the clearest ways; it is a melody that has become the "classic" reference and musical accompaniment to any romantic image whether presented seriously or as a joke. In spite of its caricaturization of all that is wrong with the concept of romanticism, it is nonetheless one of the most beautiful melodies ever written. The melody, of course, is:

Example 1.20: The Main Theme from "Romeo and Juliet" by Peter I. Tchaikovsky



The melodic form is modified binary (two part with a repetition): an exposition, the dramatic "yearning for the infinite" second part and a repetition of the first part .

Salient points and romantic devices include:

- 1. The melody starts off with a non-harmonic tone which resolves upward. Found in ms. 22 is the converse, a non-harmonic repeated tone which this time resolves downward.
- 2. Clear statement (ms. 1) and response (ms. 2) with the opening statement having slow melodic rhythm and the response being faster, providing balance.
- 3. The cadential note (F) of measure three is consonant and final as are most of the significant cadence points.

- 4. Intervalic skips:
 - (a) M6 downward, ms. 1-2
 - (b) P4 in ms. 3, relaxed harmonic/melodic resolution
 - (c) M6 upward, the classic romantic leap in ms. 5 and ms. 27
 - (d) o5 downward ms. 6-7, tense interval to set up cadence
- (e) P5 in ms. 21-22 last dramatic skip of part II, the "yearning" portion of the melody 5. Chromaticism for emotional tension is found in ms. 6 and 7 and ms. 9, 11, 13, 17 and
- 6. Repeated notes are found in ms. 9, 11, 19, 21 and repeated notes that become a non-harmonic tone in ms. 22-23
- 7. Note the tessitura of part II, from a low G below middle C, the melody dramatically builds tension and drama with extensive motific repetition by the use of sequence until the climax point of the second D above middle C is reached. This is a clear and classic example of how part II of a romantic melody should work

The remaining two compositions can be categorized as romantic/melodic, or compositions that have romantic melodies but differing harmonic, and emotional qualities. In particular, the last composition, by Keith Jarrett is a good model for a contemporary romantic composition. It has romantic elements in its melody which are balanced by the inclusion of symmetric melodic material, and a rather stark sounding slash-chord modal harmonic scheme.

EXAMPLES OF ROMANTIC/MELODIC JAZZ COMPOSITIONS

Example 1.21: "S.R. Ballad" by Ron Miller



This melody falls somewhere in between romantic/ideal and romantic/melodic with a typically romantic melody, but a not so differing harmonic foundation. Its harmony probably could be described as jazz-romantic with a few areas of stark slash chord formulae (see pp. 96-106 in Volume 1).

Romantic devices as labeled by letters on the score:

- (a) Repeated notes.
- (b) Repeated notes that become a NH tone, resolving upward.
- (c) A romantic leap of a M6.
- (d) A romantic cliché.
- (e) The expansion and sequence of the previous cliché.
- (f) Intervalic expansion in an upward contour to create tension and drama prior to a release.
- (g) The release of the previous tense expansion; it is also an extant romantic cliché (a quote) from the pop tune "If I loved You So" and many others.
- (h) Repeated notes becoming a NH tone which resolves downward.
- (i) More leaps of a M6.
- (j) Four consecutive skips upward creating extreme tension and drama for the final cadence. The final melodic resolution is by leading tone.

OTHER SALIENT POINTS OF INTEREST

- The opening statement in bars 1 and 2, of fairly fast melodic rhythm, is balanced by a slow response in bars 3 and 4.
- There is a transposition of the opening motif in bar 5.
- · A compression of the phrase in bars 7 and 8.
- · A quasi striving quality in bars 9 and 10.
- The motif in the beginning of bar 16 is inverted in retrograde the end of bar 16 to 17.
- The motif in bar 10 is sequenced and extended in bar 17.
- · Bar 19 is a sequence of bar 12.
- Bar 23 shows a small compression of the material in bar 21.
- Looking at the motif labeled (d), one can identify a sequence of it at the end of bar 23 to bar 25.
- The figure found in bars 6 and 7 relates to the material in 15 and 16.

And so on... Quite a bit could be pointed out, but the main idea is to identify the elements of romanticism and strong melodic construction.

Example 1.22a: "Solstice" (ms. 1-4) by Keith Jarrett



Romantic and salient features include:

- Measure 1 has three repeated notes with the last becoming part of the response in measure 2.
- Measure 2 has an upward skip of a m6 which is part of a romantic cliché; it also has repeated notes (see Ex.1.17b).
- Measures 2 and 3 are connected by the top pivot point pitch E, and there is an expansion of the intervals: a m6 (G# to E), a M6 (G4 to E) and a b7 (F# to E) all contributing to the sense of development and defining romanticism.

Example 1.22b: "Solstice" (ms. 5-8) by Keith Jarrett



- The previous finally resolves to the C# in measure 4; a pickup at the end of the measure initiates a truncated version of the material found in measures 1 and 2 in measures 5-7.
- Measures 8 and 9 offer a relief from romanticism by the peculiar quality of the symmetric pattern of an augmented scale.
- All winds down with a return to romantic material in bars 10 through 12, with bar 11 containing a beautiful cliché, and 12 a final sequence of it.

Example 1.22c: "Solstice" (ms. 9-12) by Keith Jarrett



The very dark and stark harmonic foundation of this composition is balanced by its beautiful romantic melody giving this composition an ingratiating quality worth investigating.

Note: the harmonic analysis of this composition is included on page 106 of Volume 1 for those interested in further reference.

CONCLUSION

As initially stated, melody writing is a complex and comprehensive subject. No amount of reading or study can substitute for the years of listening to and/or playing of great melodies that is the most beneficial means of learning to construct a good melody. If the student does not have a repertoire of great melodies of diverse origins readily available from memory alone, now is the time to start a serious listening regimen!

The suggested exercises and the recommended listening list at the end of the chapter is a place to start. In addition to relegating numerous melodies to memory, one should be able to play or sing the important themes in any key; it will be of extreme benefit for both composition and improvisation. As suggested in Volume 1 of this book for harmonic materials, any time music is present, whether by car radio, home sound system, cinema, television or live performances, listen analytically. Generally, try to describe a melody's quality as folk or art influenced; its source (tritonic, chromatic, modal); its style description (romantic, idiomatic, programmatic); try to recognize how the melody is balanced, both at the motific and phrase levels. Then determine if you like the melody or not, and why. The next step is to select a melody that particularly affects you, and analyze it, determining what it is that its author did to create a classic.

In the next chapter we will return to the concepts of harmony. Of importance are the techniques given to harmonize an extant melody. Very much a part of the "new jazz" scene is the reworking of materials from the "standard" repertoire. With that subject, we will combine harmonization, reharmonization, and melody writing into a unified whole.

SUGGESTED EXERCISES

- 1. Listen to 8 melodies of diverse styles. By section, comment on the following:
 - (a) Its placement in the folk/art spectrum
 - (b) Scalar source material(s)
 - (c) The use of statement/response
 - (d) Phrase quality
 - (e) Label the melodic style(romantic/ideal, idiomatic or others)
 - (f) Describe your emotional response.

EXAMPLES:

"Badia" by Joe Zawinul, Weather Report, from Tail Spinnin'

"One By One" by Wavne Shorter, The Jazz Messengers, from Ugetsu

The Adagio from the Piano Concerto in A by W.A. Mozart

"Blossom" by Keith Jarrett, from Belonging

"Hoe Down" by Oliver Nelson from Blues and the Abstract Truth

"Look to the Sky" by Antonio Carlos Jobim from Wave

"Rufus" by Archie Shepp from New Thing at Newport

"Work Song" by Nat Adderley, from Cannonball in New York

- 2. Compose four melodies following the specific directions listed below; harmonization is optional but recommended.
 - (a) With a tritonic source, phrase a 12-bar melody with this statement/response formula: | | S1, R1 | S1, R2 | S2, R3 | |.
 - (b) An 8-bar form with four bars of increased activity to a held cadence pitch for the remaining four bars (see Ex. 1.11).
 - (c) A 3-bar single pitch melody, developed rhythmically, balanced by contrasting material in the fourth bar (see Ex. 1.14c, p. 27).
 - (d) Compose an 8-bar romantic melody which shows a striving quality toward the infinite. Label the use of motific development (see Ex. 1.20, p. 34).
- 3. List ten melodies from the "standard," jazz, Latin, or pop repertoire that can be labeled romantic.

EXAMPLES:

"Some Enchanted Evening" by Richard Rogers

"Mayaka" by Wayne Shorter

"Without You" by Irving Berlin

"All the Things You Are" by Jerome Kern

"Something to Remember" by Leonard/Madonna

"Beauty and the Beast" by Menken

- 4. Compose a romantic melody.
 - (a) Following the form of your choice (at least ten bars).
 - (b) Harmonized in any style, but include at least two areas of slash chord technique.
 - (c) Include all performance directives: articulations, dynamics, phrasings, etc.
 - (d) Following the analysis guide found on page 40, include a comprehensive analysis; label specific romantic devices that you used.
- 5. Refer to the "Adagio" by Tomaso Albinoni included here. Completely analyze it using the analysis guide, include a labeling of the romantic devices which are used.

Adagio by Tomaso Albinoni



(Chord symbols are suggestions, not found in the original composition.)

SPECIAL PROJECT: FOLK MUSIC SURVEY

This is a comprehensive project that is related to the materials found in all chapters of this book - but in particular to the third: Pentatonic Compositions. It needs to be "in progress," with most of the work being done now, with review and additions taking place later in the study schedule.

Researching both texts and recordings, select from the world's folk musics, at least ten from different parts of the globe, and analyze, paying particular attention to the following:

- · Source scalar material
- Statement and Response organization (S/R)
- · Melodic rhythm relative to harmonic rhythm
- · Expressive devices and pitch variations

EVALUATION

Select a number of the melodies that you particularly liked, to be used later as a model for your own melodies. Make a note about the peculiarities that endeared you to any melody.

Make note of any quality that is found in common with most melodies of all categories - that may prove to be a universal "truth" of affective melody writing.

It is suggested that the reader start with the folk sources closely related to jazz compositions than continue on to personal or nationalistic interests. Start with the following folk musics:

- · African
- Japanese
- · Brazilian
- · American Indian
- · British/Irish

Of the "new world" sources, try to determine the percentage of native to European influence; for instance, what is the real influence or source of the (Cuban) Clavé?

MELODIC ANALYSIS REFERENCE GUIDE

The following is an outline of the elements of a melody that were covered in the previous pages of this chapter and will be referred to in subsequent chapters. It should also serve as an "instant" guide to be used when analyzing melodies as assigned in this book.

A. Source Materials

- 1. Single notes
- 2. Tritonic scale fragments
- 3. Tetratonic scale fragments (tetrachords see Vol. 1)
- 4. Pentatonic scales
 - (a) diatonic
 - (b) altered
 - (c) add note (sextatonic)
 - (d) blues scales
- 5. Diatonic and altered diatonic modes (septatonic)
- 6. Symmetric scales
- 7. Harmonic references
 - (a) arpeggiations
 - (b) guide tones/common tones
- 8. Quotes
- 9. Non-western scales (octatonic and more)

B. MOTIFIC DEVELOPMENT

- 1. Repetition
- 2. Sequence
- 3. Inversion
- 4. Retrograde
- 5. Retrograde Inversion

- 6. Isorhythm
- 7. Isoarticulation
- 8. Truncation/extension
- 9. Displacement
- 10. Mutation

C. CONTOUR

- 1. Directional
- 2. Intervalic
 - (a) diatonic
 - (b) chromatic
 - (c) skips
- 3. Note value
 - (a) augmentation
 - (b) diminution
 - (c) compression
 - (d) decompression
 - (e) articulations
- 4. Point of climax
- 5. Balance

D. FORM

- 1. Statement and response
- 2. Phrasing
 - (a) antecedent/consequence
 - (b) symmetrical/asymmetrical
 - (c) sectional
 - (d) through composed

E. MELODIC RHYTHM

- 1. Melodic tempo
- 2. Cadence points
- 3. Syncopation

F. EXPRESSION

- 1. Articulations
- 2. Dynamics
- 3. Effects
- 4. Sound support phrasing
- 5. Tempo markings

G. KEY/TESSITURA

H. STYLE

- 1. Dance/rhythmic
- 2. Historic/ethnic
- 3. Idiomatic
- 4. Mixed/sectional style
- 5. Vocal/romantic

RECORDINGS AND READINGS

As a listening source for melody writing concepts, almost every available recording could be a suitable example. The following lists the sources that are referred to in the text plus a few

A. RECORDINGS

At the Lighthouse Silver's Serenade Wave Rhapsody Espagnole The Firebird Black Market Zawinul Ballads The Music of Ron Miller The Sorcerer Samson and Delilah

Brooklyn Blues The Real McCoy Ju Ju Schizophrenia Out to Lunch Death and the Flower Get Happy Cinema LeGrand

Songs Without Words Symphonies No. 5 & 6 Romeo and Juliet Belonging Concerto No. 2

Liberal Arts Native Dancer Speak No Evil Silver's Serenade Adagio

Joe Henderson Horace Silver Antonio Carlos Jobim

Maurice Ravel Igor Stravinsky Weather Report Josef Zawinul John Coltrane Ron Miller Miles Davis

Camille Saint-Saëns Danny Gottlieb McCoy Tyner Wayne Shorter Wayne Shorter Eric Dolphy Keith Jarrett Tony Bennett Michel Legrand

Felix Mendelssohn-Bartholdy

Peter I. Tchaikovsky Peter I. Tchaikovsky

Keith Jarrett

Sergei Rachmaninoff

Elements Wayne Shorter Wayne Shorter Horace Silver Charlie Mariano

Milestone 9028 Blue Note 84131 A&M 3002

misc. recordings available misc. recordings available

Columbia 34099 Atlantic 1579 **GRP156** CPP/Belwin Columbia 52974

misc. recordings available

Big World 2005 Blue Note 456 Blue Note 37644 Blue Note 32096 Blue Note 84163 Impulse 9301 Columbia 30954 MGM 4491

misc. recordings available misc. recordings available misc. recordings available

ECM 1050

misc. recordings available

Novus 3058-N Blue Note 54173 Blue Note 32096 Blue Note 4131 LIP 8924-2

B. READINGS

Romantic Music

Leon Plantinga

Contemorary Harmony: Romanticism Through the 12-Tone Row

Ludmila Ulehla

Changes Over Time: The Evolution of Jazz Arranging

Fred Sturm

Music Idioms Eric Dolphy

G. Welton Marquis Simoko & Tepperman W. W. Norton, 1985

Advance Music, 1994

Advance Music, 1995 Prentice-Hall, 1964 Da Capo Press, 1979

Chapter 2

REHARMONIZATION

WORDS OR CONCEPTS TO KNOW

- 1 Standard Repertoire
- 2 Altered Modality
- 3 Substitution
- 4 Diatonic
- 5 Chromatic
- 6 Function
- 7 Harmonic Rhythm
- 8 Cadence
- 9 Cycle
- 10 Turnaround
- 11 Approach Chord
- 12 Added Chord
- 13 Target Chord
- 14 Pedal Point
- 15 Stock
- 16 Original

HARMONIZATION

Every so often, a student may inquire, "in the compositional process, is it better to write the melody first or to come up with a set of chords first?" The answer of course, depends on the individual composer; most, like the author, probably work with melody, harmony, and rhythm simultaneously, each influencing the outcome of the others. Often, a composition may develop out of a seed idea in the form of three or four chords in a vamp, or from a peculiar bass figure. Other times, a particularly satisfying motif or melodic fragment may inspire the completion of a section, or a complete composition. The point is that the initial inspiration, in whatever form it emanates, is what really provides the basis of a composition of worth.

For those whose melody writing skills are more developed than their harmonic abilities – usually it is the student who has had extensive training in traditional theory/composition, but is relatively new to jazz composition and harmony – the following are some points to consider when attempting to create a harmonic progression to a given melody. Although the techniques are meant for use with a melody original to the composer, they could be applied to an extant melody of any era.

There are two ways of accomplishing the goal: the preplanned and the intuitive. The intuitive method seems less effective in creating harmonies though, probably due to the density of and the difficulty in "hearing" many notes simultaneously.

THE PREPLANNED METHOD

To be successful with this method, the student needs to be well accomplished with the materials found in Volume I of this text. In fact, the following could be thought of as a synopsis of the important features of Volume I. Of particular importance are the abilities to recognize and work with:

- · Tetrachords, modes, and symmetric scales and patterns.
- · Modal chord construction with the "grip" method.
- · The connection of chords by common tones and structures.
- The concepts of harmonic contour.
- · The concepts of momentum.

THE PROCEDURES

A. MELODIC ANALYSIS

Using the analysis guide found on p. 40 of this volume, note any peculiarities that may predict a harmonic definition, paying particular attention to:

- Important source materials trichords, tetrachords, overall consonant, skips, symmetry and so forth.
- The emotional contour, cadence points, balancing techniques, and the point of climax.
- · The general style description: folk, hardbop, ECM.

B. BASS MELODY CREATION

The importance of a strong, well developed bass melody cannot be overemphasized – it will hold together the harmonic foundation of any composition, and will contribute to the musical development of other areas. Consider the following when composing a bass melody:

- 1. Contour:
 - (a) symmetric or asymmetric note durations.
 - (b) direction, use of counterpoint to the given melody.
 - (c) intervalic trend.
 - (d) use of melody writing procedures and development.

- 2. Rhythm:
 - (a) slow/fast, sustained notes
 - (b) repose and transition, cadence and pedal point
 - (c) speed relative to the given melody
 - (d) the use of vamps

C. CHORD SELECTION

- 1. Determine the general harmonic style goal:
 - (a) bebop, hardbop, ECM, pop/Latin, free form modal,
 - (b) analyze a number of compositions in the selected style (see p. 24).
- 2. Review the descriptions of modal harmonic styles:
 - (a) linear
 - (b) plateau
 - (c) vertical
- 3. Review the concepts of modal contour for modal chord selection.
- 4. Select chords that fulfill a modal contour goal, use of "grips" aids in the process.
- 5. Create a chord-contour melody.

TO REVIEW, THIS IS THE MELODY DERIVED FROM ALL THE TOP PITCHES WHEN SPELLING OUT THE CHORDS.

- · Use of common tones and structures.
- · Use of counterpoint, intervalic and directional contour.

GETTING STARTED

This is the hard part - unless a lot of preplanning has been done and the goals are pretty clear. There are so many possibilities, that unless one has composed a lot and developed the decision making process to the point of being confident in the musical worth of one's initial selections, the whole process can be overwhelming to the point of "giving up."

Start by composing a bass melody that follows the contour you feel best suits the harmonic goal. Try a number of chords of varied modal qualities for the first chord that will set the tenor for the development of the remaining chords. The neat step is to add chords at the cadential points, then filling in with the remaining chords between those points according to a preplanned harmonic contour.

Unless you are evolving to the intuitive approach by this time, much experimentation will probably be needed. Trying many different chords and harmonic contours will require patience and perseverance. Being accomplished with the "grip" method of chord construction will be of great assistance in this process.

In a nutshell, this is the order of steps to follow to help organize your thoughts for the harmonization process:

- Create a bass melody, following the preplanned harmonic contour and being aware of bass melodic cadence.
- Select a "first chord" per section.
- Experiment with various chords that satisfy both the preselected modal contour and cadence resolutions.
- Re-voice the chords to create a chord melody that conforms to a preplanned melodic contour and cadential requirements.
- Continue experimenting and tweaking until both the aesthetic and style defining requirements are met.

The following examples may offer some clarity and/or insights into the process. The comments address the above steps in the order given, if applicable. The melodies of the examples were composed for illustrative purposes without any concern for aesthetics.

HARMONIZING GIVEN MELODIES

MELODY I

The source of this melody can be identified as being a diatonic G minor or Bb major scale. Its directional contour is generally downward to the cadence pitch, with the cadence pitch not being balanced by an additional pitch in contrary direction. It has a final quality due to its melodic rhythm.

Example 2.1: Harmonization of a Diatonic Melody (I) and a Chromatic Melody (II)



COMMENTS:

HARMONIZATION (a)

The Bass Melody – starts with the same pitch as both the main and chord melody, creating a clear "harmonic statement." It then goes upward in a direction contrary to the main and chord melodies, with intervals that get progressively smaller, providing an increase of tension that is resolved with the final cadence pitch a tritone away. Its general source, other than the cadence pitch, is diatonic to the main melodic source.

The Chord Melody - starting on the same pitch as the main melody, there is then a P5 skip downward to a cadence pitch, then another skip to a repose-cadence, defined by the use of common tones.

The Chord Selection - the harmonic rhythm is slow and symmetric, with the chord selection based on 3-note groupings (tritonics) of the main melody. The first tritonic - D, C, Bb - implies Bb major or G minor and the "first chord" choice of G minor/D is diatonically relative to the melody.

The second chord choice, diatonic to the A-G-F tritonic, gives an effect of being brighter after the first dark Aeolian chord, providing a sense of harmonic contour. The next chord, the tonic, provides a resolution of the drama created by the previous one.

The last chord, connected to the previous by common tone, has a subtle dominant quality due to the melodic quality of the bass pitch. Notice the alternating modal quality of the selected chords: dark/bright/dark/bright, this provides harmonic contour as well as a variety of modal description. Other considerations made in the selection process were the variety of "grips," and voice-leading.

HARMONIZATION (b)

The Bass Melody - starts with the use of pedal point on the main melody pitch, showing a repose/transition contour. The overall source is a chromatic fragment which implies Phrygian with the Eb. Its directional contour is upward in contrary motion to the main and chord melodies.

The Chord Melody – is the same as the main melody due to the use of parallel "grips" to harmonize the melody.

The Chord Selection – starting with a tonic Bb (Gm)/D, grip selection was made to increase the modal/spacing tension to the E minor chord which resolves to the F13sus4 in the form of a parody cadence.

HARMONIZATION (c)

The Bass Melody - a simple chromatic scale, downward to the target F, starts on a nondiatonic Ab.

The Chord Melody - starting on a diatonic pitch, although its melodic shape shows obscured direction, it does move in contrast to the bass melody by groups of two. Ending on a nondiatonic pitch, the source of this melody is Bb major.

The Chord Selection - alternating non-dominant (major 7) chords and dominant (b7) chords implies a modal cycle resolving to a dominant of the tonic Bb.

MELODY II

This melody is purposely chromatic to introduce the problems peculiar to that source: that of selecting chords whose modality allow two or more pitches that are chromatic. In a general downward contour, the melody is resolved by balancing its direction with an upward skip of a P4. A general modality of the melody cannot be determined, but the cadence point implies F or Bb major and their relative minor tonal centers.

In general, notice the nondiatonic quality of the bass melodies up to the cadence points. The chord selection and spelling, needing to include one the main melody pitches, is more diatonic, at least to one pitch at a time. Other than example (c), most of the selected modalities are homogeneous. These traits are descriptive of the means taken to harmonize a melody that is harmonically obscured by having a chromatic source.

By now, further comments may become redundant. It is suggested that a more detailed analysis and comments be completed by the reader. The subject of harmonization will be continued in Chapter III on page 96 under the subject of "Harmonization and Harmonic Rhythm."

Having created an initial set of chords for a given melody, one can further develop the skeletal harmonic material by the use of reharmonization techniques. Although the reharmonization process can be used to develop the harmony of one's own compositions, it is most often applied to the chords of the "standard" jazz repertoire.

REHARMONIZATION

THE JAZZ COMPOSER'S PREDICAMENT

Essential to the repertoire of the learning jazz performer are a number of compositions known as "standards." These are the popular songs, ballads and dance tunes of the 20s to the 50s that are the basis of the traditionalist, beloop oriented jazz performance.

Most jazz improvisors acquire their craft by learning standards, blues tunes and a few simple modal compositions. Having invested so much effort into the learning of the standard repertoire with its ties to tonal harmony and the symmetric AABA song form, it is understandable that many resist the selection of compositions with unconventional harmonic material and unusual form for the programming of concerts and recordings. Add to this the fact that once the voice-leading of the diatonic II-V-I cadence and tonal harmony is learned, it can be applied to all tunes that are based on that system. Consider also, that most of the hippest "licks" and melodic figures having been learned from the recordings of one's hero-of-the-day can be used as one's own in any tune having the same harmonic foundation. What it all means is that new music, with harmonic and melodic material unique to its creator requires that the performer, if other than the composer, must learn the new composition and its improvisational materials with little reference to already worked-out materials. Many of the more conservative performers resist this.

Another consideration is that of this writing, there is the perception that jazz is in danger of becoming like classical music, that of a re-creative music; that the thrust of jazz recordings and performances is that of re-creating the music of the past: tonal song form compositions with ties to belop and hardbop.

All this presents a predicament for the serious jazz composer desiring an expression of originality and creativity. How does one get great players to play his tunes without coercion, and how does one address the trend toward jazz as a re-creative music?

One way is to have recorded examples of his or her works distributed widely enough that players hear them and learn to enjoy them to the point that they want to learn to play them. Of course, one needs to be in an environment where if one's compositional/performance skills are known and appreciated, and there is the possibility of attaining financial backing for the production of a recording.

A more flexible approach is work within the standard repertoire and rework the given materials in a way that the resulting product reflects the composer's personal aesthetic and creative abilities while allowing the improviser an access to his learned improvisational skills.

That is the goal of this portion of the chapter, to look at some techniques that allow the composer or composer/improviser to personalize a composition from the standard repertoire; from a mere "freshening up" of the changes to the creation of a totally new composition which is a pastiche of the original. In addition, the techniques can be used along with the previously given techniques, to harmonize a given melody for those composers who prefer to write melodies and then later add the harmony. And lastly, the techniques can be of use to the big band arranger who is desirous of creating an innovative version of an overworked standard.

The information given presupposes that the student has a working knowledge of tonal harmony and the diatonic system and is aware of cadences, cycles, turnarounds and tritone substitution. If not, consult the books listed at the end of this chapter.

THE TECHNIQUES

In addition to the techniques original to the author, many were derived from an analysis of the recordings of Gil Evans, the "standard" harmonic approach of Herbie Hancock (particularly from the Miles Davis recording My Funny Valentine), and from the methods of the many unknown arrangers of "easy listening" music.

Although the techniques can be applied to established jazz compositions, it is recommended that students limit the first attempts to "standard" II-V-I songs as they are the compositions that most have a need to be personalized.

The techniques generally fall into the following categories:

A reworking of:

- · the chords
- · the harmonic rhythm
- · the key, tempo and rhythmic style
- · the form
- · the melody

A. CHORDS

The chords given particular attention are chords that begin sections, target chords, and the chords of cadences, cycles and turnarounds.

The chords can have:

- · changed modality (alteration)
- changed chord root (substitution)

Normally the modality of a chord is changed when the root is changed.

ALTERED CHORDS

A chord alteration is simply a change in the modality of the original chord without changing the original root. Usually the new modality maintains the functionality of the original, but it is not a strict requirement. If there is a number of notes within a phrase of the original melody, try to detect a tetrachord or modal fragment to assist in determination of the new chord's modality. If there is one melody note for the chord, using commontone technique (see Chapter VII in Vol. 1) will allow a wide variety of possible alterations.

CHORD FUNCTION

The function of a chord refers to its property of being at rest or desiring resolution. Chords defined as non-dominant have little or no desire to resolve, chords labeled dominant do have a desire to resolve or are in association with chords that need to resolve (see "Momentum" in Vol. 1). To maintain a function similar to the original chord, select an alteration with a resulting modality within one to two chords above or below in the order of modal resolution.

CHORD FUNCTION CATEGORIES:

Nondominant - chords having a natural 7 or no 7:

Lydian #5

Lydian 47

Lydian #2

Lvdian 45

Lydian 53

Ionian #5

Ionian \$5

Ionian 66

Ionian 13

sus4 no 7

sus 2 no 3

maj 9 no 7

min 9 no 7

Subdominant - can function as either dominant or non-dominant

Dorian 47, #5

Dorian 47, 45

Dorian 47, 65

Dorian 67, 45

Aeolian b7, b5

Dorian b7, #4

Dorian 67, 44

Aeolian 67, 45

Aeolian 67, 65

Phrygian 47, #5

Dominant - chords having a \$7 or a \$2:

Mixolydian #2, #4

Mixolydian \$2, #4

Mixolvdian 66

Mixolydian b2

Mixolydian 42, 4

Mixolydian b2, 4

Phrygian 46, #4

Phrygian 46, 4

Phrygian \$3, b6

Phrygian b3, b6

Locrian 46

Locrian 66

Locrian bb7

Locrian b4

Locrian 54

Altered 46

Altered bb7

Altered bb6, bb7

Mixolydian sus4

Mixolydian no 4

Keep in mind that it is not really necessary to select a modality that has the same function as the original, that the overall style of the reharmonization will dictate the mode choice. (see the portion on "style")

GENERAL PRACTICE ALTERATION EXAMPLES

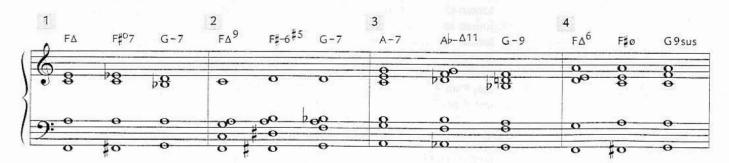
ALTERED DIMINISHED CHORDS

Diminished chords are nonmodal chords that can have a both a dominant and sub-dominant function. Due to their nonmodal character, their vertical construction tends to create an inconsistency of sonority as well as spacing quality when used in context with modal chords.

Diminished chords usually have a sub-dominant function to II minor or sus4 chords or a dominant function to I chords and are found both in cadential and non-cadential areas.

The following example is a listing of suggested alterations to the basic °7 chord to create a homogeneous modal sound.

Example 2.2: Altered Diminished Chords



COMMENTS:

- 1 Traditional resolution and spelling of the °7 chord.
- 2 Alteration of the o7 to a Dorian #5 chord (see Vol. 1, Chapter 15).
- 3 Downward resolution, alteration to a Dorian 47 (minor/major 7).
- 4 Use of the Locrian \$2, half-diminished chord to a sus chord.

SUBSTITUTE CHORDS

A substitute chord will show a change in the root of the original chord; the chord's modality is usually altered as well.

The substitute root can be:

- · a diatonic substitution with diatonic chord spellings
- · a diatonic substitution with chromatic chord spellings
- · a chromatic substitution
- a "special case" substitution based on the arpeggiation of a diminished seventh chord from the original root which includes the chromatically substituted minor third and the tritone as well as the diatonic substitution of the M6 (bb7).

A. DIATONIC SUBSTITUTIONS

These reharmonization techniques have been designed to be applied to the diatonic tonal system, since much of the harmonic material of the original version will show clear diatonic key centers.

A diatonic substitution refers to a change of root that will be diatonically related to the Ionian mode of the key center of a particular section if not the entire composition.

As an example, if the chord being substituted is an Fmaj7,9 and the key signature shows the key of C, a possible substitute root could be selected from any of the notes of the C Ionian mode.

DIATONIC SUBSTITUTIONS, DIATONIC SPELLINGS

When a diatonic substitution is made and the melody note is diatonic to the key of the section or tune as a whole, the spelling of the new chord conforms to the diatonically related modality of the modes derived from the original Ionian.

The following table, based on the key of C, gives a cross reference to all of the diatonically related roots with diatonically spelled chords. The table is constructed by taking the seven basic triads constructed from the seven different steps of the Ionian mode and placing them over each of the seven different steps. As one can see, this produces a combination of 49 possible diatonically substitutable chords.

TABLE OF DIATONIC SUBSTITUTIONS

Roots:	1 .	11	III	IV	V	VI	VII
Triads:	С	D	Ε	F	G	Α	В
G	G/C	G/D	E-7	G/F	G	A9sus4	G/B
A-	C6	D-9	E4/6	FΔ	G4/6/2	A-	B Phr
Во	CΔ2/4	D-6	E Phr	F6#4	G7	A Aeo	Во
C	C	D9sus4	E Aeo	F∆no3	C/G	A-7	B Phr
D-	CΔ6/4/	2 D-	E Phr	F6	G9no3	A Aeo	Во
E-	СД	D2/4/6	E-	FΔ#4	G6	A9no3	B Aeo
F	F/C	D-7	E Phr	F	G9sus4	A Aeo	B Loc
preferred:	G/C	D9sus4	E-7	C/F	G9sus4	A9sus4	B Phr

DIATONIC SUBSTITUTIONS, CHROMATIC SPELLINGS

When the melody note of the original chord is not diatonically related to the composition's key, the chord spelling of the new chord also will be nondiatonic to the composition's key. In this case, the new chord will be selected from one of the group of altered-diatonic modes which has both the melody note and one of its pitches in common.

Referring to Volume 1, the chords found in both volumes are from the following sources:

unaltered parent	Ionian 43 47 (Ionian)
altered no. 1	Ionian b3, 46 (melodic minor) 47
altered no. 2	Ionian \$3, \$6 (harmonic minor) \$7
altered no. 3	Ionian \$3, 66 (harmonic major) \$7
altered no. 4	Ionian b3, #5, 9 (melodic minor #5) 47

As an example, if the original melody note is Ab, and the original chord is D Locrian \$2 (half-diminished), and the key of the tune or section is in C major (Ionian), any of the altered diatonic source scales and their modes that have the pitches of C Ionian and Ab in common will be workable substitutions.

There are quite a number of selections that will work:

C harmonic major	C	D	Εţ	F	G	(Ab)	В
C harmonic minor	C	D	Eb	F	G	(Ab)	В
F melodic minor	C	D	Εķ	F	G	(Ab)	В
F harmonic minor	С	Db	Εb	F	G	(Ab)	В
Db Ionian	С	Db	Eb	F	Gb	(Ab)	Bb
El Ionian	C	Dή	Εb	F	G	(Ab)	ВЬ
A harmonic minor	С	D	Е	F	(G#)	А	В

And so on...

As will be covered in more detail later, the harmonic style and its bass melodic requirements will help determine which source scale to select.

As an example, some diatonic substitutions for D Locrian \$2 include:

FROM F MELODIC MINOR (REFER TO EX. 2.3 BELOW)

C Ionian:	C	D	E	F	G	A	В
F melodic minor:	C	D	E	F	G	(Ab) (Bb)

G Phrygian \$6, F Dorian \$7, E altered and C Mixolydian \$6, having roots in common with C Ionian as well as an Ab in their chord spellings, are selectable substitutions for the original D Locrian \$2.

FROM El IONIAN

C Ionian:	C	D	E	F	G	A	В
Eb Ionian:	C	D	(Eb)	F	G	(Ab)	(Bb)

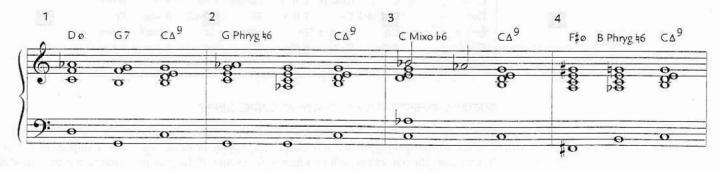
C Aeolian, F Dorian, and G Phrygian b6, having roots in common with C Ionian, as well as the Ab melody note in their spellings, are workable substitutions.

FROM A MELODIC MINOR:

C Ionian:	C	D	E	F	G	Α	В
A melodic minor:	C	D	E	(F#)	(G#)	A	В

C Lydian \$5, D Mixolydian \$4, E Mixolydian \$6, B Phrygian \$6, and of course A Dorian \$7 are substitutable.

Example 2.3: Spelled-Out Versions



COMMENTS:

- 1 The original cadence with a D Locrian \$2.
- 2 A diatonic substitution of a Phrygian \$6 for the D chord with the G chord being an alteration, both are diatonic to F melodic minor.
- 3 Use of pedal point and a diatonic substitution.
- 4 Substitutions that are diatonic to A melodic minor.

As one can see, there is quite a large variety of selections to be made that are a workable substitution for one melodic note substitution.

Where there is more than one melody note per chord, possibly a melodic fragment or motif, the modality of that fragment will determine the source of substitution. If the melodic fragment does not have a clear relationship to any modality (probably because it is symmetric or chromatically disjointed – although this is rare in tonal based harmonic systems), the harmonic rhythm must be changed by the addition of more chords. (This will be covered later.)

To assist in the selection process one should pay particular attention to the melodic quality of the bass part with the substituted chord's root sustaining a melodic consistency with previous and later roots, or of a desire to keep the roots in intervalic ratios of a fourth or fifth.

Another consideration to be made in the selection of the new chord is the desire to maintain the functionality of the original chord. This should narrow down the selection a bit. Looking at the previous table of chords listed by function, one can see that of the listed chords, G Phrygian \(\beta \), G Phrygian \(\beta \) and E altered are some selections that one could make to conform to the original D Locrian \(\beta \)2's dominant function. In fact, G Phrygian \(\beta \)6 is one of the most common diatonic substitutions for D Locrian \(\beta \)2.

The next factor to consider when selecting the substitute chord is the overall style of the reharmonization. Style will be covered later in the chapter, but for now, one of the general styles is that of the blues/urbane description. This is a sound that is typical of the works of Mingus and some of Ellington and is characterized by the extensive use of all forms of the altered (Locrian 164 and Locrian 164, 166) dominant chords. One's choice of substitutable chords in this case would be limited to that group.

Example 2.4: "You've Changed" (Turnaround, ms. 7-8 & 31-32) Blues/Urbane Style Alterations



B. CHROMATIC SUBSTITUTIONS

This technique is fairly easy for a chord with a single-note melody. Since it is a form of commontone technique, one has a choice of all the possible chords that have the melodic pitch as a part of their construction.

Of course, the selection process is made more narrow by excluding those chords that don't meet a particular style or function requirement and by being aware of maintaining the melodic quality of the original bass line.

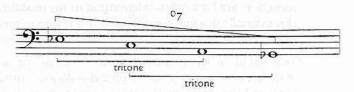
This method is still easy when there is a melodic fragment to contend with, if only because there are so many chords that will work.

SPECIAL CASE SUBSTITUTIONS: ROOTS OUTLINING A DIMINISHED CHORD

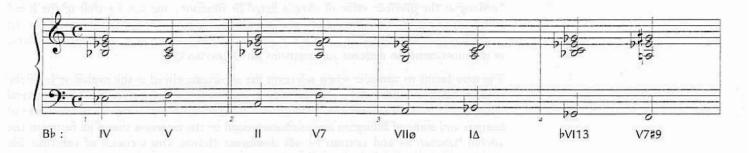
This refers to the substitution of a chord on any of the roots that are the pitches derived from an arpeggiation of a diminished seventh chord constructed on the root of the original chord (root, \(\beta \)3, \(\beta \)5, \(\beta \beta \)7). What this means is that chords that are substituted to those roots seem to work particularly well. Included with the \(\beta \)3 and the natural 6 (\(\beta \beta \)7) is the very useful substitution of the original with the \(\psi \)4, \(\beta \)5 or tritone. Tritone substitution is commonly found in all levels of reharmonization efforts as any reader of this text is well aware.

As with previous examples, choice of modality will be determined by style and function requirements. Note that the diminished 7th chord symmetrically divides the octave.

Example 2.5a: The Roots of the Diminished Seventh Chord from the 4th (Key of Bb)



Example 2.5b: Substitution Examples



COMMENTS:

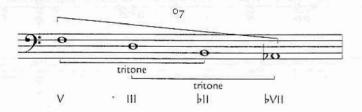
Bar 1: The basic IV-V cadence

Bar 2: Substituted root (C) a third down

Bar 3: A new root a tritone down (A)

Bar 4: Substituted root a M6 down (Gb)

Example 2.5c: The Roots of the Diminished Seventh Chord from the 5th Including Tritone Substitution (see page 116)



Example 2.5d: Substitution Examples



COMMENTS:

Bar 1: The basic V-I cadence

Bar 2: A substituted bVIIsus chord for the V7

Bar 3: A substituted III A+ for the V7

Bar 4: A tritone substitution for the V7

Bar 5: An added II chord to the tritone substitution

It is suggested the student continue the above process from the VI degree and from the root.

C. STYLE

The first consideration when starting a reharmonization project is to establish a stylistic goal. The style of the reharmonization will determine the choice of chord quality and/or function of alterations and substitutions; the amount of change in the harmonic rhythm, the selection of key, rhythmic concept, form and any other of the previously cited arranging concepts. Style is most clearly defined by what reharmonization processes are used at cadential areas: cycles, cadences and turnarounds.

Generally speaking, there are five basic styles:

- 1. Standard as the composer intended, usually having:
 - (a) traditional dominant/non-dominant resolutions
 - (b) symmetric harmonic rhythm
 - (c) similar modality and key "quality"
 - (d) limited reharmonization simple tweaking
 - (e) limited change in form
- 2. Blues/Urbane similar to the sound of the Ellington and Mingus school:
 - (a) extensive use of altered or dominant 7th chord substitutions for all minor chords found in cadential areas
 - (b) selection of darker sounding "flat" keys
 - (c) lower tessitura
 - (d) use of blue notes in melodic variations
 - (e) "dark" colortones found at melodic cadence points
- 3. Newbop based on the style of Charlie Parker's rewriting of "standards" but moderated to conform to a more contemporary harmonic/melodic approach.
 - (a) extensive use of tritone substitution
 - (b) extensive use of parallel II-Vs
 - (c) symmetric harmonic rhythm
 - (d) limited use of rewritten melodies in a moderated bebop style

4. Pop/Diatonic:

- (a) extensive use of diatonic substitutions
- (b) use of dominant sus4 chords at all cadential areas
- (c) selection of brighter key centers
- (d) relaxed symmetric harmonic rhythm
- (e) use of diatonic slash/chord construction (see Table of Diatonic Substitutions, p.51)
- (f) use of relaxed, 8th-note subdivided rhythms

5. Modal:

- (a) use of repose/transition harmonic rhythm
- (b) extensive use of pedal point
- (c) extensive use of the exotic modal chords
- (d) use of nondiatonic slash chords

These general descriptions will be further illustrated and explained in subsequent examples.

D. HARMONIC RHYTHM

This refers to the speed of the occurrence of the original chords – where and how often chords occur relative to the pulse of the composition. The harmonic rhythm of compositions of the "standard" repertoire based on the song form usually is slow and symmetric. The goal of the reworking of the harmonic rhythm is to give it a more dynamic quality by offering a contrast of slow and quick movement and by offering a contrast of openness and density. In addition, the resolution quality of cadential areas can be enhanced by the judicious use of increased harmonic rhythm immediately prior to their resolution. The speed of the harmonic rhythm is increased by the addition of chords and is decreased by the deletion of chords or by the use of pedal point. Refer to the concepts of *Repose* and *Transition* given in Volume I of this book.

Mutations of a composition's harmonic rhythm are found at two areas:

CADENTIAL AREAS

Cadential areas are sections of a tonal harmonic scheme which show an active movement toward a resolution goal. Cadential areas are comprised of cycles, turnarounds and cadences. In addition to having root movements that are diatonically related and move by fourths or fifths, their definition is determined by the function and/or modality of the individual chords. The harmonic material of cadential areas can be of additional use in tags and endings – always a problem area for both the composer and performer.

- Cadences: Chords following the function formula of dominant to non-dominant. The formula is that of the V-I, IV-V-I and the ubiquitous II-V7-I with its implied modality of Dorian-Mixolydian-Ionian.
- 2. Cycles: A group of chords having the same function and/or modality, or showing a symmetry of function and/or modality
- Turnarounds: A group of chords of mixed function/modality that are organized to resolve to a target starting point, usually to the start of a section if not the beginning of the composition.

NON CADENTIAL AREAS

Those areas in a set of chords where the harmonic rhythm is slowest, usually by having only one chord for a measure or two, or where there is found a few passing chords that have a non-functional role.

REHARMONIZATION OF CADENTIAL AREAS

Most of the harmonic content of a tonal based composition is made up of cadential formulas. In addition, most of this material is directly interchangeable with all compositions based on that system. With this in mind, it is advantageous to have a number of variations (reharmonizations) of cadential materials at the disposal of the jazz composer/improvisor. The following is a partial listing of examples of cadential reharmonizations with explanations of the process. In addition to changed harmonic rhythm, the techniques used will include alterations, substitutions, and permutations of the three. By now the student should be able to recognize that tritone substitution and some of the special case of substitutions are chromatic and only those which are not of those groups will be pointed out in the comments.

Note that in many cases the melody note or notes may need to be changed to conform to a cadential reharmonization. There is no harm in doing so and usually the end result is aesthetically viable.

A "target chord" is usually the first chord of a section or of a phrase. It usually is identified by its being the release point of a tension/release cadence or its being the object of a group of chords in a modal tension contour.

1. CADENCES

The most basic cadence is the V-I or the more defined IV-V-I. Taking the IV-V-I as a skeletal starting point, the following example illustrates some of the above given techniques.

ВЫ	IV		v		I	
	1	1	1	1	1 - 1	1
1	Εb		F		ВЬ	
2	C-7		F7		ВЬ∆	
3	Aø		Dalt		G-9	
4	Gb7		F7		ВЬД9	
5	Db-	GÞ7	C-	F7	Β♭Δ9	
6	Db-	Gb7	F#-	В7	ВЬ∆	
7	C-	G♭7	F7	В7	ВЬ∆	
8	C-	F7	F#-	В7	ВЬ∆	
9	Eb-9		F7b9		В♭∆	
10	Cø		F7#9	7-1	ВЬ∆	
11	Gb13		F7#9		ВЬ∆	
12	F9sus4		D/F		В♭∆	
13	E♭ / F	7.4	Gb+ / F	1299.7°	Β ♭ Δ / F	
14	C-A		F9sus4		ВЬД9	
15	F13sus4	1	A♭13/E	Ъ	D-9	G-9

COMMENTS:

- 1 The basic skeletal cadence.
- 2 The diatonic substitution of the II for the IV.
- 3 Tritone substitution of the VII chord for the IV, diatonic substitution for the remaining two, all three chords have altered modality - the result is a cadence to the relative minor key.
- 4 Tritone substitution of the II chord with alteration.
- 5 Increased harmonic rhythm by the addition of chords through the use of II-Vs.
- 6 Tritone substitution of the C- F7 (V) chords.
- 7 Upper neighbor approach chord to the target F7 and BbΔ.
- 8 Tritone substituted II-V for the V chord.
- 9 Alteration of the IV chord to minor.
- 10 Alteration of the II chord to Aeolian \$5 (Half-diminished).
- 11 Upper neighbor approach chord to the target V7 with slower harmonic rhythm.
- 12 Slower harmonic rhythm by the use of pedal point.
- 13 More use of pedal point, use of a IV/V to an altered V to a I/V.
- 14 Resolution by the inner voice-led B\(\pi\) in the C minor chord to the B\(\ph\) of the F9sus4 chord.
- 15 The "Small Feats" cadence (see pg. 81).

Note the diminished 7th chord outline of the roots of the first chord of the first four cadences - this illustrates the use of that previously given concept.

The above listing could be increased significantly as could the following examples. The student, having understood the concept should continue the process.

Example 2.6b: Selected Spelled-Out Versions of the Cadences



2. CYCLES

Cycles are a form of turnaround; the skeletal form has roots moving in a series of fifths with chords of all the same modality. The reharmonization process is purposely simple to maintain a cycle's modal definition.

Example 2.7: Reharmonization of Cycles

	E		Α		D		G		С		F	
erope s	1	/	1	1	1	1	1	1	1	1	1	/
1	E9		A13	راد الماريزيا المشاريزيا	D9		G13		C9	2 11-7	F13	
2	B♭13		A13	ne de la	A♭13		G13		Gb13		F13	
3	G/E7	THE VI	F#/A7	7 op 28%	F/D7	ray of the	E/G7		Eb/C	7	D/F7	
4	G#/E		G/A	Approved Contraction	F‡/D		F/G		E/C		Eb/F	
5	B/E	I I to to	E/A	en osa	A/D	equ.	D/G		G/C		C/F	
6	D/Bb	ing Ambaria.	G/A	72.ed=3	C/Ab		F/G		B♭/G	þ	Eb/F	
7	E7#9		A13	L'arb (D7#9	amb' O	G13		C7#9		F13	81 83
8	B-11	E7	E-11	A7	A-11	D7	D-11	G13	G-11	C7	C-11	F7
9	F-9	Bb13	ВЬ-9	E♭13	E♭-9	Ab13	АЬ-9	Db13	Db-9	G♭13	Gb-9	Cb13
10	A/B	В/Е	Db/E	БЬ/АЬ	G/A	A/D	B/C#	C#/F#	F/G	G/C	A/B	B/E
11	D/E	nali Sa	Eb/E	- 1 ml	C/D	0 1 250	Dŀ/D		В♭/С		B/C	
12	B/E	7	Db/El	, , ,	A/D	10 15 -	B/C#		G/C		A/B	
13	E7	B♭13	A13	Eb7	D7	Ab13	G13	D1-7	C7	Gb13	F13	В7
14	В-	E7	F-	ВЬ7	E-	A7	ВЬ-	Eb7	A-	D7	Eb-	Ab7

COMMENTS:

- 1 A basic skeletal cycle of dominant chords.
- 2 Tritone substitution of the 1st, 3rd and 5th chords.
- 3 Altered modality of the basic chords.
- 4 Alternating change of function and modality: Lydian augmented to sus4 chords by slash chord construction.
- 5 A non-dominant cycle of slash chords.
- 6 The converse of #4.
- 7 Altered dominant cycle.
- 8 Increase of harmonic rhythm by the use of II-Vs.
- 9 As above with tritone substitution.
- 10 Alternating modality/function, slash chord construction; note the pattern of both the bass line and the upper structure triad in all the slash chord examples.
- 11 Partial pedal point, slower harmonic rhythm.
- 12 As above with different modality/function.
- 13 Added tritone substituted approach chord.
- 14 Use of Il-Vs, shifted harmonic rhythm.

3. TURNAROUNDS

The selection of the skeletal turnaround depends on the target starting chord's root placement relative to the key of the section of the composition. Most compositions of the "standard" repertoire start on a I chord, a III chord (diatonic substitution of the I), a VI chord or a II chord. Of course, there is the possibility of finding a tune with a chord's root starting on a nondiatonic note but upon closer investigation it will likely be found that it had been reharmonized at some point before documentation. See the appendix for a partial listing of tunes and their starting chord roots.

Example 2.8a: Reharmonization of Turnarounds (From a I Chord to a I Target Chord)

C	1		VI		Ш		V		l (tar	get)	
	1	1	1	1	1	1	1	/	1	1	1 1
1	С		A-		D-		G7		С		
2	E-7		A-9		D-9		G13		СΔ9		
3	E7#9	1	A769		D7#9		G769		СΔ9		E. Wei
4	B♭13	F E	A13		Ab13		G13		СΔ9		-1194
5	F-9	Bb13	E-9	A13	Eb-9	Ab13	D-9	G13	СΔ9		
6	F-9	Bb13	Bb-	Eb7	Eb-9	Ab13	Ab-9	Db13	СΔ9		7. 271
7	B-9	E13	E-9	A13	A-9	D13	Ab-9	Db13	СΔ9		
8	F#-9	B13	Bb-9	Eb13	Eb-9	Ab13	Ab-9	Db13	СΔ9		_T
9	F13	Bb7	A13	Eb7	D13	Ab13	G13	Db7	СΔ9		
10	B-9	E13	Bb-	Eb7	A-9	D7	Ab-	Db7	СΔ9		
11	СΔ	F9	E-7	A7	A-9	D7	Ab-	Db7	СΔ9		
12	СΔ		Eb9su	154	ΑλΔ9		Dba6	9	C Δ^6	9	

COMMENTS:

- 1 The basic skeletal I-VI-II-V turnaround.
- 2 Diatonic substitution of a III for the I chord all roots in 5ths.
- 3 Altered modality of No. 2 above in a blues/urbane style.
- 4 Tritone substitution of the III and II chords.

- 5 Increase of the harmonic rhythm of the above by the use of II-Vs this and the next (6) are in a bebop style.
- 6 Tritone substitution of the II-Vs of measures 2 and 4 above.
- 7 Use of II-Vs and tritone substitution.
- 8 A variation of the previous example.
- 9 The F chord has dominant function to the Bb7 tritone substitution approach chord to the A13; the remaining bars continue the process.
- 10 Another variation of \$5 with the use of II-Vs and tritone substitution.
- 11 One more variation.
- 12 Slower harmonic rhythm in a modal style, chromatic substitutions.

Example 2.8b: Application of Methods to "I Can't Get Started" (ms. 6-8)



COMMENTS:

- 1 Stock turnaround, target III chord approached by an upper neighbor tritone substitution.
- 2 Alterations in a blues/urbane style.
- 3 Increased harmonic rhythm by the addition of II-Vs.
- 4 Parallel II-Vs beboppish in style.

Example 2.8c: From a I Chord to a Target II Chord

С	4	(VII)	111	VI	II (target)		
	1 1	1 1	1 1	1 1	1 1 1 1		
1	С		E-	A7	D-		
2	СФ	F7	E-7 A7		D-7		
3	F#-9	B7	E	A7	D-7		
4	СΔ	A13	E7#9	A13	D-11		
5	СΔ	F9	Bb13 Eb13		D-9		
6	F‡ø	B7#9	Bŀ7#9	El-9sus	G9sus		
7	C13	Ab/B7	B♭13	A9sus	G9sus		
8	G- C7	B♭-9 E♭13	F- B♭7	B♭- E♭7	D-11		
9	F‡− B7	C- F7	B- E7	E- A7	D-9		
10	A/B	Ab/B	G/A	Gb/A	F/D		

Example 2.8d: Application of Methods to "Body and Soul" (ms. 6-8)



COMMENTS (TABLE 2.8c):

- 1 The basic turnaround.
- 2 Added dominant upper approach chord to the target III chord, also the tritone substitution of the dominant VII chord.
- 3 Tritone substitution and alteration of the I chord, also the II chord of a II-V to the target III chord - bebop style.

- 4 Altered modality.
- 5 Tritone substitution and alteration of the III and VI chords.
- 6 More substitutions and alterations Mingus/blues/pop.
- 7 Another variation of #6.
- 8 Increased harmonic rhythm by the use of II-Vs, the Gb7 is an upper neighbor approach chord to the target F minor.
- 9 A II-V and altered version of #3.
- 10 Use of pedal point to slow the harmonic rhythm.

COMMENTS (EXAMPLE 2.8d, "BODY AND SOUL"):

- 1 The stock variation with a tritone sub approach chord to the III chord in ms. 8.
- 2 Added harmonic rhythm, blues/bop in style.
- 3 Simple chromatic bass line, blues style alterations.

Example 2.8e: From a Minor I Chord to a Target Minor I Chord

F-	1	VI	11	V
211	1 1	1 1	1 1	1 1
1	F-9	Dø	G13	Calt
2	F-9	АЬ13	Galt	Calt
3	F-9	АЬ13	DŀΔ	G♭13
4	F-9	Dalt	Gø42	Calt
5	F-9	Eb ⁶ 9	Db69	C7#9
6	F-9	Eb- Ab7	Ab- Db7	Db- Gb7
7	F-9	Ab/B7	B♭13	A9sus
8	C-766	C-9	CΔ#5	Bb13sus4

COMMENTS:

- 1 The basic turnaround.
- 2 Tritone substitution of the VI chord, alterations.
- 3 Alterations and tritone substitution for the II-V cadence.
- 4 Alterations in the Mingus/blues style.
- 5 A pop/blues style, i.e., "Hit The Road Jack."
- 6 Increased harmonic rhythm, closer to a bebop style.
- 7 Obscure modal variation.
- 8 A modal/pedal point variation.

Turnarounds and cycles are of extreme importance for both the composer and the improvisor; a thorough understanding of their construction, voice-leading and function is a top priority in the learning process. It has been stated (by Kenny Werner) that knowledge of, and the ability to improvise over turnarounds will assure the aspiring jazz artist "gigs galore."

SUBSTITUTE SYMMETRIC PATTERNS

This is a method of reharmonizing a cadential or turnaround area by substituting all of the roots of the original with those that are derived from a created symmetric pattern. The goals that are usually met are that the substituted group resolve to the target chord in the same cadential manner as the original and that the starting chord's root be the same. There is quite an increase in harmonic rhythm with this technique so experimentation must be done until the resulting number of chords works with the specified tempo. Of course, this technique will require that the melody be Altered, recomposed or even deleted for that section. Substitute symmetric patterns can be of musical use at final endings or codas where there is always the problem of redundancy at the least, and indecision at the most. And in some cases, where the pattern is long enough, one could substitute an entire section, usually the bridge, with symmetric material.

This method is most represented by the reharmonization efforts of John Coltrane, Joe Henderson and Jerry Bergonzi and because of the intrinsic qualities of symmetry, the method should be used only occasionally and with caution.

There are two methods of creating symmetric patterns for use as substitute roots in cadences and turnarounds. A simple, yet effective method is to merely set up target pitch tonalities that symmetrically divide the octave, then add cadential material that defines the target tonalities. The two considerations to be made are the resulting harmonic rhythm and overall direction of the target tonality pitches. For instance, you can divide the octave in an upward or downward direction the following ways:

Symmetric Division	Tonal Centers	Measures
\$4, tritone	2	2-4
M3, augmented	3	2-4
m3, diminished	4	4-8
M2, wholetone	6	4-12
m2, chromatic	12	6-24

The fewer tonal centers involved, the less dense the harmonic rhythm and number of measures, and the more similar the new material will be in function to the original. Selection of the octave division will depend on the number of measures to be reharmonized and the number of chords to be included in the skeletal harmonic rhythm. Having established the skeletal material, the next step is to add material to change the harmonic rhythm, change modalities, or to reharmonize as in previous examples to meet a style goal.

For a more comprehensive approach to creating symmetric patterns, refer to Chapter XIII, p. 98 of Volume 1 of this book.

Example 2.9a: Substitute Symmetric Patterns

The equal division (tritone) of the octave, direction does not affect the result. This is a concise two to four bar example, that would be a good final ending.

COMMENTS:

- 1 The skeletal turnaround with its two tonal centers and basic dominant chords.
- 2 An increase of harmonic rhythm by adding the II chords of the V7s.

Example 2.9b: Augmented Upward



The three-part division of the octave (augmented). The use of this division of the octave is found in many reharmonizations due to its extensive use by, and subsequent influence of John Coltrane.

COMMENTS:

- 1 Key centers established by the skeletal pattern.
- 2 Added II-V cadences.

Example 2.9c: Augmented Downward



COMMENTS:

- 1 Key centers established by the skeletal pattern.
- 2 Added II-V cadences.

Example 2.9d: Diminished Downward



COMMENTS:

- 1 Key centers established by the skeletal pattern.
- 2 Added II-V cadences.

Example 2.9e: Diminished Upward

COMMENTS:

- 1 Key centers established by the skeletal pattern.
- 2 Added II-V cadences.

The four-part division (diminished) can get quite active with the increase of harmonic rhythm.

As mentioned before, one should be careful when working with symmetry, as it can sound contrivial with over-use.

The above examples being skeletal could be further reharmonized by changed modality, tritone substitution, or by increasing the harmonic rhythm with the addition of more II-Vs or by slowing it down with the use of pedal point, or use of any of the techniques that were demonstrated in previous examples.

CHANGING THE HARMONIC RHYTHM OF NON-CADENTIAL AREAS

As stated earlier, this is the changing of the harmonic rhythm by the addition or deletion of chords in the areas of a tonal-based composition that are not defined as cadential. These areas can be one or two measures of the same chord or areas where there is parallel chord movement toward a target chord or section. Depending on the tempo of the composition, the technique for increasing the harmonic rhythm can include the simple addition of a chord immediately prior to a target chord to the adding of as many as eight chords to a measure (in 4/4 time). Also of use is the addition of cycles and cadences. The slowing of the harmonic rhythm is accomplished by either deleting chords or by the use of pedal-point.

Arranger/composer Gil Evans used these techniques extensively, as a bit of listening to his works will reveal. The rhythm section team of Herbie Hancock and Ron Carter while with Miles Davis also used this technique often when performing "standards" although to a lesser degree than Gil.

THE TECHNIQUES:

The simplest change in harmonic rhythm is to add a chord immediately prior to a target chord. These target-seeking chords are called approach chords.

Approach chords can number more than one and are often used in groups of two or three depending on the tempo of the composition. The use of more than three chords found prior to the target chord produces the perceived effect of being parallel "added chords."

In addition, approach and added chords usually are of the duration of a half note or less dependent upon tempo. The root selection of the added chord(s) is determined by the melodic quality of the bass line; the desire to adhere to the modality (diatonicism) of the phrase or section or the desire to use free-form chromaticism. If one chooses to insert a cycle or cadence, the root movement is predetermined as skips of a fifth or fourth.

Example 2.10a: Added Harmonic Rhythm ("I'm Getting Sentimental Over You," ms. 1-5)



With the above in mind, one could approach the target chord by either a half or whole step above the target (upper neighbor), or a half or whole step below the target (lower neighbor).

The selection of the approach chord's modality depends on the need to define chord function, maintain a homogeneous modal contour or just to satisfy one's personal preference. In most cases an approach chord's modality will be the same as that of the target chord.

For subsequent examples the term original will be used to refer to the chords that are presumed to be the composer's; the term stock will be used to mean the chords that are found in "fake books" and common practice performances.

COMMENTS (EXAMPLE 2.10a):

- 1 The original D6 and C7 made into a II-V, tritone substitution of the Db6 with a modal alteration.
- 2 Two added approach chords of the same modality just prior to the first target chord A-11, an added upper neighbor (tritone substitution)chord prior to the G half-diminished target chord.
- 3 One more added chord, D Altered, completing the group of approach chords to measure 2; the use of the D, G Altered, the added upper neighbor Db13 and Gb13 put this version in a "blues/urbane" style.
- 4 Starting with the diatonic substitution of a C minor for the previous Ao chord, the approach chords now have a new target. The Ab7 acts as an upper neighbor to the G7 in addition to being a tritone of the Ab chord of the previous version; the G7 to Db13 is an added cycle to the target C-9; the Bb7 is an upper neighbor to the A-9 with the remaining chords a dominant cycle to the primary target F chord in a bop/blues style.
- 5 The final version is in a quasi-modal style with the alteration of the C-9 to a C9sus4 and the addition of the B-11. Measures 3 and 4 show the use of parallel II-Vs in a bebop style. Note the overall diatonic relationship of the bass melodies of each version to Eb Ionian, the song's key. Also, the bass melody moving in generally contrary motion dramatically increases the tension until resolved by the target chord.



Example 2.10b: Spelled-Out Examples of Versions No. 4 and No. 5 of Example 2.10.a

See pg. 118 "Semi-Mental."

Those who have played "Yesterdays" know of the problem area of measures 5-8 where the harmonic rhythm is very slow as compared to the melodic rhythm. The following shows two ways to resolve that problem.

Example 2.10c: "Yesterdays" (ms. 5-8, spelled out) by Jerome Kern



Fast harmonic rhythm for a version with a slow tempo.

COMMENTS:

- 1 & 2: Parallel chords of the same modality as the first in the bass melody in contrary motion to the main melody. The B alt acts as a dominant chord to the target Bb-9.
- 3 & 4: The F9sus4 is a tritone substitution of the Bø, with a change in modality; it also is an upper neighbor dominant chord to the E9sus4 target.

Example 2.10d: "Yesterdays" (ms. 5-9, spelled out) by Jerome Kern



Slower harmonic rhythm for versions requiring improvisation.

COMMENTS:

5 & 6: Harmonized by two-note melody groupings with parallel Lydian augmented chords, the style is contemporary-modal. The second half of the phrase is the same as the previous example.

In Example 2.11a (next page), notice that the selected substitutions for the original $B\Delta$ are from the previously mentioned "special case" °7 chord: B-D-F-Ab. The selected substitutes are then put over the dominant Bb pedal point producing an increasing tension that will ultimately be resolved when the Bb becomes an Eb. Part II is of slower harmonic rhythm – although there is no melodic movement in the bass part, the upper structures do affect the overall harmonic tension/rhythm.

In Example 2.11b (I) the selected pedal point is the tonic and has a lesser need for a bass melodic resolution and tends to be slightly more relaxed than part II. Notice that the original and the substituted chords in the last measure are diatonically in common with Ab melodic minor (Ab Dorian 7). The chord in measure 2 of II is derived from harmonic major (Ionian b6) for those not having studied Vol. 1 of this text.

Before going on to the final group of reharmonization techniques, we will look at an example which includes various versions of a complete composition that utilizes all of the methods discussed previously.

Example 2.11: Slowed Harmonic Rhythm, Excerpt from "Night and Day" by Cole Porter



Slowed harmonic rhythm by the use of pedal point (see pg. 120 and pg. 80).

Example 2.12: Excerpt from "Dancing In The Dark" by Dietz and Schwartz



Slowed harmonic rhythm by the use of pedal point.

"Autumn Leaves" is an appropriate first example in that its harmonic construction includes extensive use of cycles and turnarounds. Additionally, it is a very popular harmonic formula among improvisors, composers and the listening public. There are many recorded versions of the tune; the most sophisticated is probably by Miles Davis. The harmonic material seems to have ties to folk music, probably of South Western European source. Refer to the "Theme From M.A.S.H." and "Europa" (Gato Barbieri) for other songs based on the chords of "Autumn Leaves."

Example 2.13a: "Autumn Leaves," by Kosma/Prévert (Reharmonization Table)

Bb A sections										
	Style	1111	1111	1111	1111	1111	1111	1111	1111	
	Stock	C-	F7	ВЬ∆	ЕЬΔ	Aø	D7	G-9	G-	
1	Вор	C- Gb13	F7 B7	ВЬ∆ Е7	ЕЬД ВЬ-	Aø Eb7	D7 Ab7	G-9	Galt	
2	Вор	Db- Gb7	C- F7	B- E7	ВЬ- ЕЬ7	Aø Eb13	Dsus Ab13	G-9	Galt	
3	Pop	Gb9sus	F9sus	Esus	Asus	Dsus	Gsus	Csus	Dbsus	
1	Modal	F9sus	D/F	Esus	Asus	D Phrygian	1/.	D Aeolian	1/.	

-84	Bridge							
Stock	Aø	D7	G-	G7	C-	F7	ВЬ∆	ΕλΔ
Pop	El-7#11	D9sus	Db9sus	C9sus	Gŀ13#11	F9sus	E9sus	A9sus
Moda	D Phrygian	1.	D Aeolian	%	F9sus	%	E9sus	%
Moda	F# Dor #5	G Dor#5	Dalt	Dbsus	Ealt	Ebsus	Dsus	Dalt ⁴⁶
Blues	Aø Eŀ7	Dalt Al-13	Galt	Dhalt	C- Gl-13	F7 ^{#9} B13	B♭Δ E7	ΕλΔ
Вор	B♭- E♭7	A- D7	Ab- Db7	G- C7	C- F7	F#- B7	B ♭ Δ E7	ЕЬ∆

		C sections								
	Stock	Aø	D7	G- C7	F- B♭7	ЕЬΔ	D7	G-	G-	
ı	Pop	El-9sus	D9sus	C9sus	%	E♭9sus	D9sus	C9sus	1/.	
2	Modal	El-9sus	D Phrygian	C9sus B♭∆	Bl-sus Asus	Ab13 ^{#11}	Aø Dalt	G-9	Galt	
	Pop	Aalt	Dalt	B-9 E-9	F9sus	El-9sus	Dsus D7 ^{b9}	C9sus		
	Вор	B♭- E♭7	A- D7	G- Calt	B- E7	Bŀ- Eŀ7	A- D7	G- C7	Ab- Db7	
,	Вор	El-9sus	A- D7	G- Calt	F- Bbalt	Ebsus	A- D7	G-9	Galt	

The comments for the above and subsequent examples will include only the most salient as by now the reader will have become quite familiar with the techniques.

COMMENTS:

A SECTIONS:

- 1. The use of the G altered in the turnaround of version 2 provides a strong dominant function to the II minor starting chord.
- 2. Version three with its parallel II-Vs is a popular one among the beboppers and is heard often at concerts and "jams."
- 3. The use of sus4, Phrygian and Aeolian chords in slow harmonic rhythm, as well as the use of pedal point, easily defines version 5 as a modal reharmonization.

Bridge sections:

- 1. Version three provides an affective balance to a "busy" bop version such as version 3 above, with the use of pedal point and modal chords.
- 2. Version 4 is of interest due to the use of chords from the unusual source, melodic minor #5 (Dorian #5 & altered 46).

Example 2.13b: "Autumn Leaves" (Illustrating a Combination of Many of the Above Given Reharmonization Techniques)



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It is suggested to the players reading this book that for this and other multi-versioned reharmonizations that a performance include a different version for each chorus. As an example, the author uses the following format when performing the tune:

[A1] version 2, [A2] version 3, [B] version 3 and/or version 4, [C] version 2 and/or version 3

Of course, alternating during the "blowing" choruses is also suggested.

COMMENTS:

A SECTION

Bars 1-4: A combination of the reharmonizations No. 1 and 3 found in Example 2.13a above. The inclusion of the Lydian augmented chords gives it a contemporary modal sound as well.

Bars 5-8: Like 1-4, a combination of versions 1 and 3 above.

Bars 9-12: A bit more bop-like with the included II-Vs.

Bars 13-16: Similar to reharmonization of version 2 from above.

THE BRIDGE

Bars 17-20: Spelled-out example of version 3 above.

Bars 21-24: Continuation of version 3 above.

C SECTION

Bars 25-28: Like version 5 from Example 2.13a.

Bars 29-32: Continuation of version 5.

ARRANGING TECHNIQUES

In addition to changing the chords, harmonic rhythm and melody of a preexisting composition to meet our creative goals, a number of methods can be applied that fall within the category of arranging techniques.

CHANGE OF KEY

An often overlooked but effective modification of a "standard" is to simply put it in a key that is rarely used for that particular song. In most cases, what is referred to as the original key of a song differs from the original since it is rare to have access to original documentation of the source "standard" whether in written or recorded form. A good example is the composition "Stella By Starlight." "Stella," a beautiful although over-played jazz standard is the main musical theme of the movie *The Uninvited*. The original version, quite different from the familiar jazz version, is a rhapsodic, romantic theme in the key of D major. Most jazz performers play "Stella" in the key of Bb major. The change of key was most likely due to the desire to put it in a key that works well for trumpet and tenor saxophone, both Bb keyed instruments. Since concert Bb is the written key of C for trumpet and tenor sax, the new key choice is probably related to a desire to ease the improvisation difficulties of what can be a difficult tune in any key.

Rather than change the key to accommodate any perceived instrumental problems, attaining a freshness of sound or a sense of an improvement of the original should be the primary purpose for a key change. When selecting a new key, consider the following:

BRIGHTNESS/DARKNESS

Although open to discussion, many respond to the the sharp keys as being bright-sounding with the flat keys sounding dark. There may be some validity to this perception with stringed instruments but it best to make your own judgment by experimentation.

TESSITURA

"Tessitura" denotes the general placement of the range of the song within the grand staff, this has a clearer effect on the bright to dark quality of a tune due to the laws of acoustics. If the selected new key places the overall range of the tune much lower or higher than it was, it affects how the fundamental of each chord is perceived which subsequently affects the sonority of each chord. (see Vol. 1 appendix)

STYLE

Select a key that enhances the stylistic qualities of the reharmonization: a lighter, higher, brighter key for a pop style; a lower, darker key for the Mingus/urbane style. You will find that the key choices that work well for the Mingus/urbane are Bb, Db, Eb and Gb with C, D, E, F, G and A for a lighter style.

INSTRUMENTATION

If you are reharmonizing for a specific instrument, consider the sound characteristics of that instrument by register and select the key that best satisfies that goal. That the keys of Bb and Db tend to sound dark and warm on tenor sax may be a partial explanation for the use of those keys with the urbane style.

All of the above being subjective, the best approach is again – experimentation. Play the already reharmonized chords in various keys keeping the stylistic goal in mind. If there is no strong stylistic goal, start by selecting a key that is opposite in quality from the reference key. If the reference key is dark and low as in Bb minor, try E or F\$ minor. If the original key is Eb or F major, try A or B major. As an example, the author, tired of playing "The Girl From Impanema" in F major at as the usual medium paced bossa nova put it in B major to be performed very fast in a swing style, the result was a renewed and exciting sound. The new chord voicings took on a refreshing brightness due to the change of tessitura, particularly the $\Delta 6/9$ and sus4 chords. The bridge, now in C major also took on a whole new quality.

MODULATION

This term denotes the changing of the key of a section or all of a composition within its arrangement. Modulation can provide a dramatic effect if the new key(s) are brighter and/or higher than the starting key. It is common to find a modulation up a whole tone or a third for the last chorus of an arrangement. Not as common, but recommended is the changing of the key by section: the first key AAB, with a higher key last A. Or put the bridge (B) in a different key: first key AA, new key B, first key A. There are so many possible variations of the use of modulation you must again – experiment.

RHYTHMIC STYLE/TEMPO/METER

Another non-harmonic/non-melodic variation that can be made is to change the rhythmic style of the original version. This can be a change in the tempo, the meter and/or the intended performance style (swing, bossa nova, Afro/Latin). A change of tempo is the simplest to accomplish: playing what is normally an up-tempo as a slow ballad. Or both a change in tempo and style: a slow bolero played as a very fast swing tune. Lastly, changing the meter can be an affective means of creating a "fresh" version of a "tired" overdone standard. Try changing a 4/4 swing tune to 3/4, 6/8 or the more exotic 10/8, 7/4 or 11/8. Of course you must consider the change in harmonic and melodic rhythm as a result of the changed meter. Even more exotic is the changing of the meter by sections: AA 4/4, B 7/4, A 4/4. The possibilities are extensive – so imagine and experiment!

FORM/TIMBRE

These two are the last items to investigate to complete the project to a finished end-product. Whatever the form of the original source material (most will be song form AABA), the adding of extra sections will allow the composer to express his/her most personal creative abilities as the new material will be most original to the composer. Consider adding to the basic form an introduction, a coda, interim linking sections within the arrangement and totally new unrelated sections if desired. The new sections can be based on the original source material or completely new.

Timbre refers to instrument selection for the ultimate performance. Scoring, orchestration or instrumentation should be considered in tandem with style, tempo and key selections; all combined together toward an end-product. Orchestration is beyond the scope of this book and it is assumed that the general reader has some background study in instrumentation. If not consult the recommended readings at the end of the chapter.

At this point, much information has been presented which can be applied to the task of a reharmonization project. Realize that not all the techniques will be used at one time but all certainly should be considered.

The last subject of this chapter is the reworking of the melody of the original source song. Melodic alteration could include the simple tweaking of a few notes to match a change in a chord to the composing of a whole new melody as in bebop compositions. But first we will look at a number of reharmonization examples which will include comments regarding their most salient features.

REHARMONIZATION EXAMPLES

Example 2.14a: "Body and Soul" by Johnny Greene

(original key: C, new key: Db)

Dβ	1111	1111	111	11	1111
1. Stock	E♭-9 B♭7 ^{#5}	Eb-9 Ab7	DŀΔ	Eb-9	F-9 E ⁰
2. Urbane	Eŀ-9 Bŀ7 ^{#5}	A13sus F/Ab	G7 ^{‡11}	F#-11	Falt Bhalt
3. Modal	Absus Bb/Ab	G-9 C7 ^{#9}	F-A	F#sus	F-9 Bisus
4. Trane's	Absus Vamp	F/Ab7	Db∆/Ab	A+/Ab	Db/Ab E-9 A13
		WATER STATE	454		1.
	1111	1111	111	11	1111
1. Stock	E♭-9	F7.	Bb-9	Ab7	D♭ F-9 B♭7
2. Urbane	Eb-9 Db-9 Gb13	Cø F7 ^{b9}	Bb-9	Al-sus	D♭∆ A/C B9sus B♭7 ^{♭9}
3. Modal	Eb-9 Db-9 Gb13	Co Bh- Ao Da	lt Gø	Al-9sus	DbΔ B9sus Bbsus
4. 'Trane's	Absus Vamp*	Absus Cø F7	69 F+/Ab	G+/Ab	E+/Ab F+/Ab DbA E- A7
	2.				
	1111	1111	111	11	1111
1. Stock	D♭ E-9 A7	DΔ E-7 A7	DΔ	G-6	DΔ E-7 A7
2. Urbane	DbΔ A/C B9sus	DΔ/A A9sus	DΔ/A	A Phryg.	DΔ/A Asus
3. Modal	DbΔ E-9 A13	D∆ A Phr. G:	us F# Aeol.	Csus Dsus	Absus Abø Asus
4. 'Trane's	DbΔ E-9 A13	DΔ9 E-7	F#-9	G-9	DΔ F7 ΒΙ-Δ DΙ-7
	1111	111111	111	111	1111
1. Stock	DΔ	D-7 G7 CΔ	Eb ⁰ D-7	G7	C7 B7 B♭7
2. Urbane	DΔ/A Asus	F/G E/G CΔ/G	B/G F/G	E/G	C13 B13 Bb13sus Bb7
3. Modal	DΔ Ásus Absus	Gsus E/G CΔ	Bb-7 Eb7 AbΔ	Bsus E∆ G7	C13 B13 Bb9sus
4. 'Trane's	G♭Δ A13 DΔ9 E-9	Dø G7 ^{b9} CΔ	ЕЬ13 АЬД	B7 ΕΔ G7	C13 B13 B♭11

(* see Ex. 2.14b)

COMMENTS:

VERSION #1: (STOCK)

The reference set of chords and key for this tune is the generic "fake book" changes. The original key is C but jazz performers prefer Db which is great for tenor saxophone as well as for the dark quality that the key implies.

VERSION #2: (URBANE) see pg. 83

The overall style, showing the influence of Monk and Mingus, is the urbane style. This is a reharmonization by the author and is the harmonic basis of the composition "Soul Bod" found later in the chapter among the examples of reharmonizations with a new melody.

The amount of nondiatonic substitution requires that a new melody be included. Note the degree of chromaticism in the bass melody. The use of a tritone substitution for the Bb7#5 in bars 1 and 2 would have made the bass melody almost completely chromatic. The pedal point bridge offers a clear contrast to the bass melody of the A section both melodically and with its harmonic rhythm. The extensive use of altered, 7#5 and 7b9 chords is typical of the blues/urbane style.

VERSION #3: (MODAL)

The prominent use of sus4 chords as well as the inclusion of Phrygian and Aeolian chords suggests a modal style. The modality is moderated by the use of altered, half-diminished and minor/major seventh chords: chords found in use with the urbane style. The Coltrane symmetric substitution is found at the last half of the bridge.

Of note is the following:

- The G-9 to C7 \sharp 9 is a II-V to the diatonically substituted F- Δ for the Db Δ in bar 3.
- The Bb/Ab acts as an upper neighbor dominant chord to the G-9.
- The use of the bVII° lower neighbor to the V9sus4 (Go to Ab9sus4) in bar 7 and 19 (Ab° to A9sus4).
- · An added chord D9sus4 in bar 18.

VERSION #4: ('TRANE'S)

In cut time, John Coltrane's version has extended use of a pedal point vamp in the A sections; the use of whole tone harmony at the turnarounds, (note the augmented triadic upper structures moving in whole tones) and of course the use of the symmetric substitution pattern in the bridge area. On the recording, there is an opening vamp figure and an out-of-tempo reading of the final turnaround before going into an in-tempo coda (shown below).

Example 2.14b: Absus Vamp



Coda: DbΔ | FΔ | AΔ | Eb-9 Ab7 | DbΔ GbΔ | F-9 Eb-9 | DbΔ

Note the outline of the augmented triad for the first three roots.

Example 2.14c: Version No. 3 (Spelled Out)





"Stella by Starlight," a very popular standard in the jazz community, has a beautiful melody and great "blowing" changes. As mentioned previously it is another song that came from the pen of of a movie composer. It became popular after Frank Sinatra recorded it and Miles Davis under Sinatra's influence subsequently took it as "his own."

Example 2.15: "Stella by Starlight" by Victor Young

1. Original	ΒλοΔ	Bbo		F13		F7 ^{#5}		F-9	
2. Generic	Eø	A7 ^{b5}		C-Q		F9sus	B13sus	Bl-13s	us
3. Miles	Eø	Aalt		C-9	(Db-9)	F9sus	B13sus	B♭13s	us
4. Herbie	(start	s at measure 9)				1			
Lil og -	6	7 H124 H124		8	far #87	9		10	
1. Original	Bb7 ^{b5}	Е♭∆9	atrict signs	E♭-6		Β♭(Δ)	/F Bb/F	Εø	
2. Generic	B♭13 ^{♭9}	EbΔ Asi	us	A♭13sus		B/Bb/	4-9G-9 F-9	Eø	A7 ⁶⁵
3. Miles	7.	ЕЬ∆ А1	3sus	АЬ9#11		ВЬ∆		Εø	A7 ⁶⁵
4. Herbie	and Print	= Alegan day		11 113	i,	ВЬ∆		Εø	Aalt
n i Hasi	11	12	13	י אורצות	14	LEAFT.	15	16	STEENER STEEN
1. Original	D-	Db6	F/C	da 7	в⊩-∆6		Aø	Aø	Y
2. Generic	D-Δ C-Δ	Bb-9 Eb9sus	F#/A	D7 ^{#9}	C9sus		El-9sus	D9	sus D7 ^{b9}
3. Miles	D-69 C-6	Bø Bb-9	Aalt	Dalt	G-9 C	sus Bb-	Aø	Da	lt
4. Herbie	D-69	G13 Calt	FΔ	F‡−6 ^{#5}	G Aeol	G# Aeol	A Aeol Bb-7	7 A-	9 Dsus Dal
r jest i na –	17	18		19	u	20	-1	21	2.2.5
1. Original	G7 ^{#5b9}	7.		C-9			%	ЕЬ-∆	
2. Generic	Galt	· /.		C−∆		G-9	F-9	Εø	
3. Miles	Galt	%		C-9			%	Ε _{ν-} Δ ₁	3
4. Herbie	G13sus Galt	%		C-9/G	F-9/G		%	GbΔ	Gb9sus

	22	23	24	25	26
1. Original	7.	D-7 ⁶	%	D⊩-6 ^{#4#5}	/.
2. Generic	E⊩-∆ 6	D7 ^{#9}	G-9 F-9	E-11	A13sus
3. Miles	%	Eo7	ВЪ ⁶ 9/F	E-11	A13sus
4. Herbie	GbΔ GbΔ4	E-Δ 6	Bb6/F	E-13	A Phrygian

	27	28	29	30	31	32
1. Original	Ab6	G7	Со	F7 ^{b9}	ВЬ	%
2. Generic	Ab13sus	G13sus	Gb13sus	F7 ^{#9}	В⊳∆ А9	G-11 F-11
3. Miles	Absus Abalt	G Phr. Galt	Calt	Falt	B♭13 E♭13	B♭13 F-11
4. Herbie	Ab13sus	Galt	Db-9 Gb13	Falt/C Falt	Аң/ВЫ ВЫ ⁶ 9	1.

COMMENTS:

VERSION #1:

The original chords as heard on the movie sound track, transposed to Bb for referential purposes. The original key is D major.

VERSION #2:

A slight enhancement of the stock "fake book" source changes, put more into an open modal style - important points are:

- 1. Use of the II min/maj7 to V9sus4 in bar 3 to 4
- 2. Use of upper neighbor approach chords in bars 4 and 7, and increased harmonic rhythm by added chords in bars 11, 20, 24, 31 and 32
- 3. An example of a tritone substituted sus4 chord for a half-diminished in bar 29.

VERSION #3:

A generalized compilation of what occurs on the Miles Davis recording "My Funny Valentine." There are so many variations by each chorus that the whole performance would have to be represented to be complete. For instance, when the band goes into double time the harmonic material shifts into more of a bebop style with the use of side-slipping II-Vs and less use of modal chords.

- 1. The use of approach sus4 chords and/or added chords bars 4, 7, 11, 12 and 14.
- 2. The use of bluesy altered chord cycles bars 13, 16-7, 29-32.
- 3. Use of modal chords (sus4, Aeolian, Phrygian.) in bars 4, 5 and 26-28.
- 4. In essence, the reharmonization shows the influence of Herbie Hancock.

VERSION #4:

This is Herbie Hancock's solo and clearly reveals the depth of his harmonic sophistication due to his musical education as it has overt ties to classical music as well as jazz.

- 1. Extensive use of modal chords the use of a an diminished chord altered to sound modal in bar 13 and 23; Aeolian chords in bars 14, 15, 19 and 20; Phrygian in bars 19, 20 and 26, sus4s in 17, 18, 21, a Lydian augmented in bar 22 and a Lydian #2 in bar 31.
- 2. Still some reference to the blues in bars 11 and 12, and 30.
- 3. Use of pedal point in bars 17 to 21.

The remainder of the solo, going into double time, changes harmonic style with qualities of both blues/urbane and bebop. It is suggested the interested student study the transcription as found in the book *Herbie Hancock: Classic Compositions & Piano Solos* by Bill Dobbins, Advance Music.

REWORKING THE MELODY

Having completed the reworking of the harmonic material and any changes and additions regarding key, form, tempo and meter, it is time to consider the treatment of the melodic material. Of course, it is assumed that some melodic goal was established when the project was first initiated. Depending on the project goal, the changes to the original melody could include basic tweaking chores, partial new melodic material or a complete new melody having a variable degree of reference to the original.

Basic tweaking includes:

- 1. A realignment of the melody to conform to any shifts in the harmonic rhythm.
- 2. The changing of a few pitches to match any chord substitutions or alterations.
- Changing the melody to conform to a style change. For example, changing what was
 originally an 8th note subdivided bossa nova into a swing tune would require the use of
 syncopation and triplet subdivision.
- 4. Partial deletion of the melody. Deletion of some sections of the melody is a common practice particularly where there is extensive use of substituted symmetric patterns. The bridge to Coltrane's "Body and Soul" is a typical example.
- 5. Partial new melodic material. Most commonly found is the addition of new melodic material in a few phrases or sections. This partial melodic restructuring maintains a close alliance with the original version while demonstrating the melody writing skills of the reharmonizing composer. This melodic treatment is typical of the hardbop style.
- 6. Complete new melody. Finally, there are reharmonizations that have completely new melodies with their only ties to the original being the skeletal harmonic reference. There is variation in the degree of departure from the original as well, with the most extreme having no identifiable reference to the original except with the harmonic structure of the "blowing" changes. Any further departure would put the final product beyond the definitive limits of a reharmonization project.

TWEAKING THE MELODY

Example 2.16a: "Body and Soul" (ms. 5-8) John Coltrane's Version



Example 2.16b: "Without a Song" (ms. 1-7) Joe Henderson's Version



Example 2.16c: "Night and Day" (ms. 1-8) Jerry Bergonzi's Version



Before we look at some reharmonization examples with altered or new melodies it should be pointed out that rewriting the melody over a set of standard changes is intrinsic to the bebop style. It is suggested that in order to create a more contemporary end-product, one should strive to limit any referral to a bebop melodic style when rewriting the melody.

NEW TITLES

Regarding the project's title, most composer/reharmonizers tend to include some verbal reference to the original title in the new title. How cryptic and clever the new title will be can be one of the more "fun" chores of the reharmonization project. If the degree of departure from the original is subtle, the original title is usually kept.

EXAMPLES OF REWORKED MELODIES

Example 2.17: "Dark Dance" by Ron Miller



MELODIC FEATURES

Based on the show tune "Dancing In The Dark," the melody is partially rewritten with alternating sections of new melody and very slightly altered original melody. In addition, the new melody falls in the areas where the reharmonization shows the most departure from the original.

The sections of new melody are typical of the melodies of the hardbop style of reharmonization melodies: dramatic skips, rhythmic motifs, tension inducing cadences and covert bebop ornamentation. Note the use of chromaticism where ornamentation is used.

Harmonic features include: (see Ex. 2.11, p 69)

- Use of pedal point (slow harmonic rhythm) ms. 1-8, 17-24 which enhances the contrast
 of the fast harmonic rhythm of the swing sections ms. 9-16, 25-32. This is typical of
 the hardbop style.
- · More of a bebop style of reharmonization at the swing sections.
- Substitution of the final target I chord with a bII E Lydian.

Example 2.18: "Small Feats" by Ron Miller



MELODIC FEATURES

This example has a completely new melody in a diatonic, relaxed and lyrical style. Based on the jazz standard "Giant Steps" by John Coltrane, the composition is the result of the author's need to provide an example of the use of extensive diatonic substitutions for the jazz composition class at the University of Miami. The resulting reharmonization sounded so good, the process was completed by the inclusion of a new melody. The lengthened harmonic rhythm allowed the creation of a more relaxed and lyrical melody as compared to the original which is essentially a chordal-outline symmetric pattern as found in Slonimsky's Thesaurus of Scales and Melodic Patterns. The most salient feature of this melody which is a result of the diatonic quality of the reharmonization is the extensive use of triadic motifs.

Bb G D G Cb D G Measure: 2 5 6 9 10 14 21 22 23 24 25 27 29 30

Most of the remaining melodic material is based on tritonic source material maintaining a consistent simple quality. (see Chapter 1, p. 13)

REHARMONIZATION FEATURES

The prominent technique used is diatonic substitution. There is a short area of pedal point, but mostly the reharmonization follows the symmetrical harmonic rhythm of the original. The biggest difference is in the doubling of the harmonic rhythm which allows both a more lyrical melody and an easier time-of-it during improvisation. Of note is a series of reharmonized II-V-Is based on diatonic substitutions where the II is replaced by a V9sus4, the V by a iv minor/major 7, and the I by a III minor or a III altered (ms. 4-5, 8-9, 10-11 and 14-15). Both the original and the new version's cadential areas move toward target roots based on an augmented triad. The important point is not to depart too much from the original's strong target cadential areas; it is the means of keeping the harmonic intent of the original.

Example 2.19: Ron Miller's Reharmonization of "Giant Steps" by John Coltrane



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Example 2.20: "Soul Bod" by Ron Miller



MELODY - IMPORTANT POINTS:

- The melodic cadences resolve to "darker" modal character tones: M1-#5, M2-b9 &13, M3-b5, M4-b6 and M6-b5 and 13.
- A Gb (F#) acts as a pivot point for most of the melody.
- A low tessitura enhances the melodie's dark quality.
- Upward skips in Ms. 1, 4, and 8 are dramatically resolved in the 2nd ending. The upward skips at the 2nd ending set up a climactic release to the brighter key of D major.
- · Use of the deleted-melody method for the bridge.

REHARMONIZATION - IMPORTANT POINTS:

- The A sections are reharmonized in a darker, blues/urbane style showing an influence of Monk and Mingus.
- Contrasting bright pedal point/modal style of reharmonization in the B (bridge) section.
- · Refer to Example 2.14a version #2 for more details.

The last composition included as an example illustrates the use of a melody that has no overt ties to the original; the only clear reference to the original is the "blowing" changes which are only slightly reharmonized.

Example 2.21: "Meeting At Terminus Corner" by Roland Kirk



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THE MELODY

This melody, like "Soul Bod's," has a quality that defines it as an obligato melody or perhaps a bass line. The melody of "Soul Bod" was in fact written to be a tenor saxophone countermelody in a two horn arrangement. One can speculate that the melody to "Termini's Corner" possibly has its genesis in a similar manner. Whatever the composer's motifs, the melody has little resemblance to the original which is "On Green Dolphin Street." Notice that the last two bars outline a turnaround to the key of Bb.

THE REHARMONIZATION (BLOWING CHANGES)

As pointed out above, this composition is based on "On Green Dolphin Street," a popular jam session tune, recorded extensively by Miles Davis. The original key is probably C major. Most jazz versions are in Eb major or C major. Roland Kirk's as you can see is in Bb major. Of interest is the use of a bIII 13 (Db13) substitution for what is usually a I-9 (Bb-9) in bar 3. Bars 5 through 8 show the use of a chromatic turnaround to the target C-9 chord of bar 8. The rest of the harmonic material is close to both the original and other jazz versions.

PIANO ARRANGEMENTS

A recommended reharmonization project to undertake is that of an arrangement for solo piano. It has the added merit of being a condensed score to be used for possible expansion by orchestration.

CONCLUSION OF CHAPTER II

Much information has been presented on the previous pages, hopefully not so much as to be overbearing or too little to be unclear. Bear in mind that not all the techniques will be used in any one project and that there should be some perceived reference to the original song by the astute listener. The following suggestions will help to accomplish the desired result.

- Have a stylistic goal in mind before starting the project. Sometimes you may change styles within the project by section.
- Having established a stylistic goal, select a key and tessitura that is appropriate for the style selection.
- · Reharmonize the turnarounds and cadences.
- Add only a few chords prior to target chords at first. Extensive playing of the project at this point will help determine how many more chords can/should be added.
- Try to keep the original cadence points and chord function at those points. Keep the reharmonization simple at these areas.
- · Don't overlook the strengths of modulation and added sections.
- If keeping the original melody, don't be afraid to make slight adjustments to match any change in chords.
- Don't let the project become too abstract get too removed from the original. The
 aesthetic problems that have been revealed in a number of student reharmonization
 efforts have been traced to the use of too many techniques and not following the cadential and modal contour of the original. So edit the project and keep it simple.

Many of the songs that have become part of the jazz repertoire were introduced to the listening public by vocalists. It has been written that much of the Miles Davis repertoire came from the Frank Sinatra song book. It is recommended that those seeking "good" songs to add to their list listen to the recordings of Frank Sinatra and Tony Bennett; an added benefit is that the arrangements are of the highest quality including the reharmonizations.

SUGGESTED EXERCISES

- 1. List at least twenty tunes by their starting chords: I major, I minor, II minor, II dominant, VI minor and so forth.
- 2. Referring to the tables of reharmonized cadences, cycles and turnarounds, continue by adding at least 10 more examples to the table of turnarounds, a I to a I and a I to a II.

REHARMONIZATION PROJECTS

- Select a standard tune of a medium tempo and reharmonize according to a preselected goal; alter the melody to some extent.
- 2. Select a standard with a slow tempo and reharmonize following a vertical modal model: use both pedal point and many areas of added chords.
- Include comments about goals, procedures and anything else that was considered when initiating with the project.

EXTRA

Listen to the Jerry Bergonzi version of "Just Friends" from the CD Standard Gonz - what Coltrane tune provided the model for this reharmonization? List the similarities.

RECORDINGS AND READINGS

From the mid 80s to the early 90s, almost every major and many minor jazz performers had to present a CD of "standards." There is no problem finding listening material for this subject. The following list is a good place to start – each is of the highest quality and highly recommended.

A. RECORDINGS

Alone Together	Clare Fischer	Advance 9709003
Setting The Standard	Dave Liebman	RED 235
Standard Gonz	Jerry Bergonzi	BN 936
My Funny Valentine	Miles Davis	CK 48821
Quiet Nights	Miles Davis/Gil Evans	COL
Miles Ahead	Miles/Gil Evans	CK 53225
Coltrane's Sound	John Coltrane	ATL 1419
Portraits From The Past	Frank Sinatra	BRM 101
Jazz	Tony Bennett	CBS 40424
Ballads	John Coltrane	GRP 156
Standards Live	Keith Jarrett	ECM 1317
Dancing In The Dark	Fred Hersch	Ches JD90
Domino	Roland Kirk	MG 20748
Cinema LeGrand	Michel Legrand	MGM 4491
Something	Tony Bennett	COL30260
The Kicker	Joe Henderson	OJC 465

B. READINGS

Clare Fischer: Alone Togethe	r/Just Me	
न्या कि जाने साम्यान जाने	Bill Dobbins	Advance Music
Herbie Hancock: Classic Jazz	Compositions & Piano Solos	
Tips of that Admir income	Bill Dobbins	Advance Music
Jazz Harmony	Andy Jaffe	Advance Music
Chord Scale Theory & Jazz H	Harmony	
	Nettles/Graf	Advance Music
Hearin' The Changes	Coker/Knapp/Vincent	Advance Music
Changes Over Time: Evolution	on of Jazz Arranging	
	Fred Sturm	Advance Music
Miles Davis	lan Carr	Quill
Giants of Black Music	Rivelli & Levin	DaCapo Press
Inside, Outside	Reese/Markewich	New York
World's Greatest Fakebook	Chuck Sher	Sher Music
Melody Writing	Kasha & Hirshorn	Songwriters
Jazz Keyboard	Jerry Coker	CPP/Belwin

PENTATONIC COMPOSITIONS

DESCRIPTION AND DEFINITION

For the composer who is looking for an under-represented mode of expression – a means of attaining a "fresh" sound, pentatonic compositions are a recommended source to pursue. Certainly, there are many recorded or documented jazz compositions based on a pentatonic scale, but only a few that either are based on altered pentatonic sources, or are harmonized with advanced modal techniques. Also, with pentatonic compositions, the emphasis is on melody writing – continuing the covert premise of this volume.

That is the goal of this chapter - the creation of a composition based on a simple, lucid pentatonic source which is balanced by a contrasting complex harmonization. The simplicity and purity of the folk-based pentatonic melody, particularly when organized following folk melodic procedures, seems instantly to endear the listener; it is hard not to compose a good melody based on a folk-music model.

KINDS OF PENTATONIC COMPOSITIONS

There are three general categories of pentatonic compositions:

- 1. Harmonizations of documented extant pentatonic folk melodies.
- A newly composed melody based on the motific and phrasing formulae of extant folk melodies.
- A completely new melody with little reference to an existing melodic shape or organization, but still being based on a pentatonic source scale.

To assist in reader comprehension, a few representative compositions from each group include:

Reharmonizations of an extant composition:

"Oriental Folk Song," by Wayne Shorter, Night Dreamer

"Yaqui Folk Melody," by Keith Jarrett, Treasure Island

"Gula Gula," by Jan Garbarek, I Took Up The Runes

New melodies based on folk organization:

"Badia," by Josef Zawinul, 8:30

"Ponte de Areia," by Milton Nasciemento, Native Dancer

"Tokyo Blues," by Horace Silver, Tokyo Blues

New melodies, pentatonic source scales:

This category is quite extensive and includes all the compositions that are normally thought of when referring to a pentatonic composition. They include many tunes that are found on the Blue Note label of the 60s era, many pop tunes, and many tunes that are associated with John Coltrane and McCoy Tyner.

The main distinction between these compositions and the previously listed is that the harmonization is usually quite simple or "common practice," and the pentatonic source scales are usually that of the unaltered diatonic group: the simple minor pentatonic or sometimes the major pentatonic.

Representative compositions include:

"Search For the New Land," by Lee Morgan, Search For The New Land

"Pursuance," by John Coltrane, A Love Supreme

"Smitty's Place," by McCoy Tyner, Expansions

To meet the goals of this chapter, that of creating a work that has a balanced contrast between the purity and simplicity of a folk-modeled melody with the art quality description of advanced modal harmony, the two composers whose recorded works deserve investigation are Josef Zawinul and Wayne Shorter – particularly with their contributions to the

Chapter III

PENTATONICS

WORDS OR CONCEPTS TO KNOW

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- 2 Extant Melody
- 3 Shape
- 4 Altered Pentatonic
- 5 Delete Note Method
- 6 Combination Method
- 7 Trichord
- 8 Palindrome
- 9 S/R Formula
- 10 Linear Pentatonic
- 11 Vertical Pentatonic
- 12 Plateau Pentatonic

group Weather Report. Joe, in particular and at present time shows an affinity for folk-based and "world music," and should be a first choice for study.

At this point in the chapter, the reader should review the concepts of the placement of music in general, and melodies in particular, within the folk/art spectrum. (see p. 11). In addition, the reader should have completed the special assignment found on page 40.

PENTATONIC MELODIES

SCALE SOURCE, DEFINITION AND CONSTRUCTION

Definition:

As the name implies, a pentatonic scale is a grouping of five different pitches within an octave; a 5-note scale fragment. Because there are missing pitches, modality is obscure or implied, or more than one parent modality is represented.

There are some melodies that although based on a pentatonic source, will be seen to have added pitches at key cadential points. They will be referred to as added-note pentatonics in subsequent examples.

Pentatonic source scales and subsequently, a composition's description, fall into two groups – those based on an unaltered source pentatonic and those based on an under-used altered pentatonic. It is recommended that an emphasis be placed on a consideration of using one of the altered pentatonics for attaining a desired "fresh" sound. Most well known pentatonic compositions are based on the common-practice minor pentatonic, as the examples given later will reveal. An unaltered pentatonic source will be referred to as a common-practice source scale.

CREATING PENTATONIC SOURCE SCALES

There are three ways of creating pentatonic source scales:

- 1. The delete note method
- 2. The combined trichord method
- 3. The shape creation method

THE DELETE NOTE METHOD

With this traditional method, one simply deletes any two pitches of any one of the 210 usable modes, (see page 128 in the appendix) reducing what was a seven pitch scale to a five pitch scale – the resulting modal definition is dependent upon which pitches are deleted. The resulting "shape" of the truncated scale also should be considered with this method. We will look at that concept in more detail when covering shape creation later in the chapter.

The usual notes deletion procedure is to extract the pitches that make up the interval of a tritone – some altered modes have two or more sets of tritones. Looking at the major scale (Ionian mode), the tritone is found on the fourth and seventh degrees. Erasing those pitches creates the major pentatonic. The melodic quality of this pentatonic – its harmonic definition and pitch resolution qualities – will show a significant change; refer to pentatonic scales in the appendix.

Example 3.1a: The Unaltered Major Scale



Example 3.1b: Altered Diatonic No. 1



Example 3.1c: Altered Diatonic No. 2



Example 3.1d: Random Deletion of Pitches



Example 3.1e: Random Deletion of Pitches



Traditionally, once a source pentatatonic is created by the deletion method, the remaining diatonically related pentatonics are created by pitch transposition.

THE TRITONIC COMBINATION METHOD

This method is the corollary of the tetrachord method found in Volume 1 of this text. Like the creation of the modes, creating pentatonic scales by this method also gives an order to the created list. A order of brightest to darkest is apparent as well as an implied order of modality. Where in Volume 1 tetrachords were combined to create modes, we will now combine trichords to create pentatonic scales. Like the creation of modes by this method, the procedure requires that the sum of the tones, semitones and the "connector" pitch should equal twelve. The difference in this case is that the number of different pitches will be five.

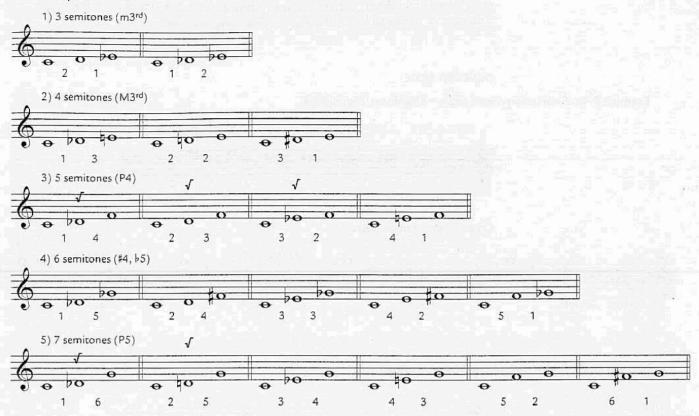
Trichord (tritonic, see p. 13): pure, primeval, natural and singable, a trichord is a three-note scale fragment and is the simplest of melodic shapes; it is the basic melodic structure of the pentatonic scale.

If the reader were to construct a simple two stringed lute-like instrument out of a box and spare wood, then by plucking an open string and then stopping the string with one finger then plucking the string again followed by plucking the next open string, the result would be a trichord. This event, were it to have happened in early history, suggests the process for the advent and evolution of scales. Notice that many trichords are the linear representation of structures: the sus2, sus4, Phrygian, and more. We will return to this when covering harmonization techniques.

The following is a listing of all the trichords that when combined will produce a set of usable pentatonic scales.

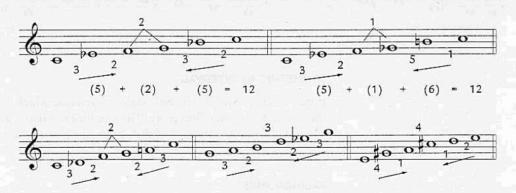
The table below is organized by interval formula, it could be reorganized by order of increasing brightness to darkness if desired. The checked $(\sqrt{})$ items are trichords that are *structures*.

Example 3.2: The Table of Trichords



The creation of pentatonics by the combination method requires that there be five different pitches, and including the connector pitch, the sum of the intervals equal twelve. The process is to place a trichord going upward on the tonic pitch and a trichord going downward from the pitch that is found an octave above the tonic pitch. The connector interval is found between the two. Care must be taken that the sum of the two selected trichords does not exceed eleven; there needs to be room for at least a single semitone "connector" pitch.

Example 3.3: Creating Pentatonics By The Combination Method



Note: A complete listing of all usable modes and pentatonic scales is found in the appendix on page 122. These listings were created by a computer program – the C programming language listing is included on page 134 as well for the interested computer-literate reader.

SYMMETRIC PENTATONIC SCALES

These are scales that either are derived from symmetric scales or are themselves symmetric in their intervalic formula.

To create a pentatonic scale which implies the sonoric quality of the source symmetric scale, the procedure is to write out the source scale and then delete the number of pitches that will produce a 5-note scale. The primary consideration is the resulting shape and melodic quality of the created scale and how well it defines the sonoric definition of the original.

Another method is to combine trichords in a way that the resulting tone to semitone formula shows a symmetric pattern. An interesting grouping among these is the palindrome – a number of these will be included in the following examples.

DELETED NOTE

Example 3.4a: Source Symmetric Scale - Dominant Diminished



Created pentatonic scales:



Example 3.4b: Source Symmetric Scale - Augmented



Created Pentatonic Scales:



SYMMETRIC BY INTERVAL

It may be that there is only one usable pentatonic which is found in this category: perhaps the astute reader may find more. The one listed is also a palindrome. Of course, if we were allowed to break the bounds of the octave, the list would increase significantly.

PALINDROMES



These are symmetric patterns in which the pattern is a mirror image from the center pitch to both the left and right outer limits. Or it is a pattern that will read the same from left to right, or from right to left.

Table of Intervals for Pentatonic Palindromes

Tric	chord	(c)	Tric	chord
1	2	6	2	1
2	1	6	1	2
1	3	4	3	1
3	1	4	1	3
3	2	2	2	3
2	3	2	3	2
2	2	4	2	2
4	1	2	1	4
1	4	2	4	1

Note that like the previous examples of construction by the combination method, the tones and semitones add up to 12.

Example 3.5: Palindromes (listed in the same order as in the above table)







By having covert symmetry, palindromes offer an organizational model that can create an interesting and musical result - they should be considered when organizing any or all the elements of music: harmonic rhythm or mode selection, counterpoint, and form, as well as scale creation.

CREATION OF PENTATONICS BY SHAPE CREATION

This process actually duplicates the previous two but differs by its goal and procedure. One of the attributes of a pentatonic melody is its clarity of contour. The idea here is to visually draw-out a contour, or shape and manipulate the pitches to conform to it. This is another example of working with the concept of *balance*; it is also a technique that is intuitive and requires that the composer be confident in decision-making abilities.

Looking at the *shape* of a pentatonic scale created by one of the previously given techniques is a recommended editing activity. The contour of a created pentatonic scale should not be so asymmetric or jagged that it loses its folk-like simplicity. More will be said about this later.

Another form of shape-based scale construction process is to take the unaltered major pentatonic, and add a number of sharps and/or flats to create a desired shape.

Note that the three means of creating pentatonics overlap – that each method creates pentatonics that can be created by the other. After creating a number of pentatonics with the methods given on these pages, turn to the listing in the appendix to verify that the created scales are indeed listed there – all usable pentatonic scales should be included.

Clarification and Listing of the Common-Practice Pentatonics

Major Pentatonic: C D E G A C

Simply, the major scale without the tritone intervals (F and B).

Minor Pentatonic: C Eb F G Bb C

A transposition of a major pentatonic - not to be confused with the following minor pentatonic.

Dorian Pentatonic: C D Eb G A C

This is derived from the Dorian \$\forall 7\$ (melodic minor) mode. Note that a tritone (Eb and A) is still present - the deleted tritone is F and B. The Eb and A are defining pitches of a Dorian modality, the A being the \$\forall 6\$. This is often called the minor pentatonic - but for compositional purposes, we will refer to this one as the Dorian pentatonic, and the previous one as the minor pentatonic.

Blues Pentatonic: C Eb F Gb Bb C

This pentatonic is derived from the Eb melodic minor scale, the b5 gives it a blues-like sound, it also has many pitches that belong to a Cø (Locrian \$2) chord, the 6th mode of Eb melodic minor.

More common-practice pentatonics will be found in subsequent examples.

Having pitch materials with which to work, the next step is to organize them into a musical product.

MELODIC ORGANIZATION

Keep in mind that the main goal of pentatonic melodies is to maintain the purity and simplicity that is the endearing characteristic of folk music. The best way to meet that goal is to organize your melody based on particularly effective extant folk melodies.

This is one of the reasons behind the suggested assignment found in Chapter I on page 40. The most important means of organization is motific and phrase *balance*.

Having completed a study of folk musical examples it will be found in most cases that the balancing of phrases and motifs is clear and symmetric. At the motific level, of importance to us is the balancing of an opening *statement* with a complimentary *response*. We will refer to this as an S/R formula. Within and without this text, this melodic device will also be referred to as call and response and statement and answer. The important concept is that many of the more accessible folk melodies have the same or similar combinations of S/R relationships. One of the most used is: S/R/R – a statement, a response, and a repeat of the same response.

Phrase organization is the same but on a larger scale: longer in length by measures rather than by pitches. Most phrase organization follows a simple antecedent to consequence formula, which is a larger version of a statement and response. The point is to strive for clarity and accessibility to assure that the aesthetic goals of pentatonic melody creation are to be met.

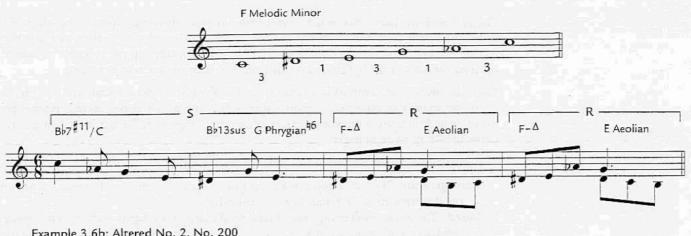
Another point to consider is how the directional contour (shape) of motific material affects the desired perception of simplicity. It is suggested that for either the statement or the answer portion of the motif, that the basic tritonic structure be clearly presented. In other words – do not change direction within a motific shape until the trichord is defined.

There are a few melodies in which that is not the case - they are great melodies, but are less simple and folk-like. A short listing of tunes in which the tritonic is not clearly presented include: (1) "Ponte Areia," and (2) "Boogie Woogie Waltz." These compositions will be included in the analyses found later in the chapter.

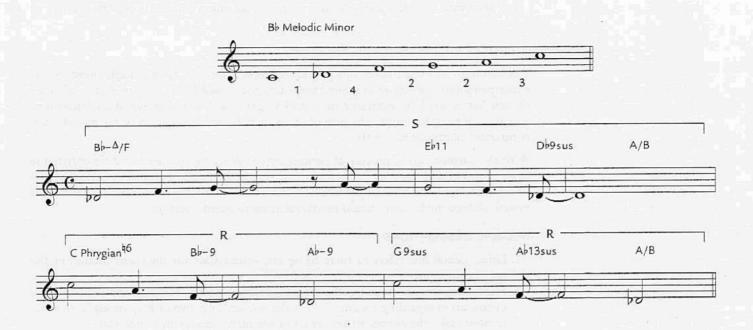
Another means of phrase or motific organization – although a bit esoteric – is to follow the spoken rhythms as suggested by the poetic metric forms: iambic, trochaic, anapestic and others.

And lastly, as presented in the chapter on melody writing, a balance in melodic rhythm is highly recommended - contrasting a slow statement with a fast answer, or the converse, a slow statement responded with a fast answer is musically effective.

The following examples will demonstrate the organization of two altered source scales with the well-used S1/R1/R1 format. In addition, maintaining a clear exposition of the tritonic and a balance of directional contour and melodic rhythm will be shown.



Example 3.6b: Altered No. 2, No. 200



Additional examples of the use of the previously given techniques will be pointed out later when a number of pentatonic compositions will be analyzed.

FORM AND STYLE

The only defining factor that must be met with a pentatonic composition is that the melody be, and clearly show the attributes of a pentatonic source scale. Other than that, any harmonic, rhythmic and formal presentation is possible. Considering the precepts of *balance*, contrasts of harmonic, rhythmic and other musical elements are recommended.

There are pentatonic compositions that are based on only one source scale and one chord, to compositions that have two or more source scales with as few as two melody pitches per chord. In addition, the composition can be of any style category: ECM, hardbop, swing, Afro-Latin, rock/pop – you name it!

The following is a brief description of some of the groups:

Homogeneous: The entire composition is in one style - harmonic, rhythmic, or any of the descriptions of pop, hardbop and the others.

Mixed: The most interesting, one finds combinations of Latin sections and swing. Contrasting harmonizations, or any contrast one can imagine. Often, a general style goal will dictate the combination. As an example, many hardbop pentatonic tunes will start with an Afro-Latin style and contrast that with a swing, II-V type bridge.

HARMONIZATION AND HARMONIC RHYTHM

The harmonic accompaniment of a pentatonic melody can vary from a single chord for the entire pentatonic melody to as many chords that there would be if every two notes of melody were harmonized. In addition, there could be chords with non-diatonic root relationships and areas of tonal harmony. The goal of course is to balance the quality of the melody with contrasting harmonic materials.

With the harmonization process of pentatonic compositions, we need to differentiate the descriptions of melodic sources, harmonic rhythm and chord selection. The categories are: linear pentatonic and plateau pentatonic – these relate to source scale selection with linear modal, plateau modal and vertical modal referring to chord selection.

MELODIC DESCRIPTIONS

- Linear pentatonic refers to there being one source scale for the entire section or the entire composition.
- 2. Plateau pentatonic refers to there being different source scales found in symmetric organization regarding measures usually one scale per two or four measure division. In most cases, the change in key center rather than a change in source scale.

There is no description for melodic vertical pentatonic since changing the melodic source at too fast a pace would negate the premise and goals of the project.

CHORD SELECTION/HARMONIC RHYTHM

LINEAR MODAL

When there is one source scale for the entire composition or section, the key center of a selected chord could be either diatonic to the pentatonic parent source or non-diatonic, and due to their missing pitches, pentatonic scales can have more than one parent source. Using the ubiquitous and simple F minor pentatonic as an example, the following is a partial listing of parental source modes or chords.

Diatonic Roots

Start by selecting roots that have the same pitches as the source pentatonic. Comparing all pitches of the scale with each root pitch, the accumulated intervals define a set of color tones. Only the most definitive are listed.

The Pentatonic: F Ab Bb C Eb F

Roots Color Tones Modes/Chords F b3, 4, b7 min 11, Dorian, Aeolian, Phrygian Ab 6, 9, 3 $\Delta 6/9$, mix sus, $\Delta 44$, $\Delta 5$

ВЬ	5, 1, 2	Mixo sus, Dorian, Aeolian
C	4, 66, 67, 63	Aeolian, Phrygian
ЕЬ	2, 4, 5, \(\psi \)	Dorian, melodic minor, Mixo sus

SECOND LEVEL DIATONICS/NON-DIATONIC

There are a number of roots that although not diatonic to the source pentatonic, are diatonic by chord implication or by being a member of a set of modes that are transpositions of one of the diatonically related modes/chords.

As an example, if the root is Ab (see above), one of the modes is Ab Mixolydian, which is the fifth mode of Db Ionian – so, any of the modes (transpositions) of Db Ionian will be diatonically related to the source F minor pentatonic and be available to harmonize any of the five source pentatonic. Usable examples include: $Db\Delta6/9$, $Gb\Delta6/9$, and Ab9sus4.

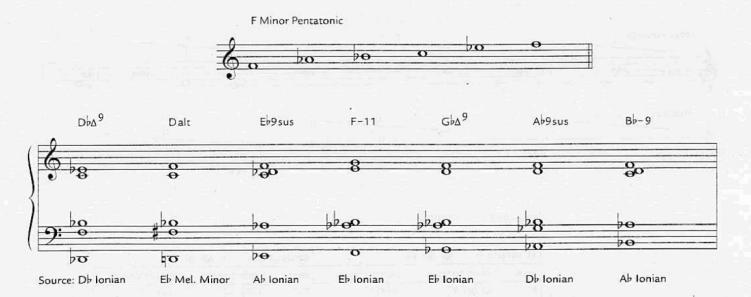
Selecting Other Non-Diatonic Roots

There are some other roots that have oblique ties to the source pentatonic. Again, look at the modes derived from an Eb root; one is melodic minor. Taking Eb melodic minor as a parent source, two modes/chords that work well are Gb Δ \$4 and D altered. Others include: Gb Δ \$5 and Bb Mixolydian b6.

Bear in mind that all of above is in reference to the simple F minor pentatonic, and one can see that the chord selection process can get quite comprehensive and complex.

As has been seen in previous chapters, the creation of a strong root melody helps to narrow down the selection process a bit. The common practice root/chord selection for F minor pentatonic would include: F-11, $Db\Delta6/9$, $Eb\Delta6/9$ and Bb Mixo sus, with D altered and Ab Mixolydian sus having a secondary usage.

Example 3.7: F- Pentatonic with Selected Source Modes and Chords



To realize the musical value of this example, have someone sing or play the scale while you play the given chords - you may "hear" a tune in the works.

PLATEAU MODAL

In pentatonic compositions, this refers generally to a symmetric organization of the harmonic rhythm, or to there being either a new pentatonic source or a new tonal center for the originally selected pentatonic source, at symmetrically assigned measure intervals. Usually there is a change at a two, four or eight bar interval. Chord selection is by the same method as given above.

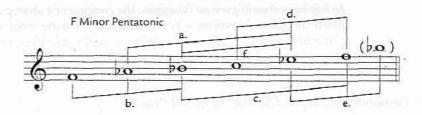
VERTICAL MODAL

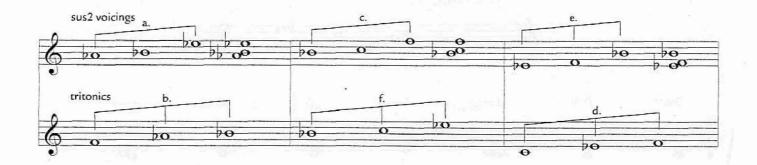
This refers to the harmonization process in which there is a new chord for every two or three melody notes – depending on the tempo of the performance. Because there are fewer melody pitches to harmonize, there can be many chords that are non-diatonic to the source pentatonic. Because of the importance of the tritonic shape in pentatonic melodies, most chord changes take place at a three pitch grouping. And as long as the tritonic is present in the melody, two pitch chord changes are quite affective, and actually tend to create a clearer cadential quality. The harmonization process is the same as previously given, but with more importance assigned to the melodic quality of the root-melody. And because there are fewer pitches to find that are in common with the melodic fragment, there will be many more chord spellings that are accessible for selection.

To list all possible chords that will "work" for a three pitch fragment, it is suggested that you segment the pentatonic source into three-pitch structures. These are the structures that were introduced in Vol. 1 and were referred to as upper structures (see Vol. 1). Having the structures listed, comparing each with all roots of the chromatic scale will reveal all possible modes/chords available for selection. The process is the same for two-pitch melody fragments, with the resulting list being much larger, making the musical choices that much more difficult. To restate, the melodic quality of the root selections will focus the results.

THE PENTATONIC STRUCTURES

Example 3.8: Chord Selection for Three-Pitch Fragments



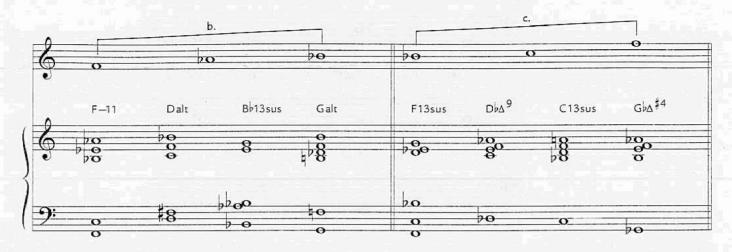


For selected structures:

structure A Ab Bb Eb			structure B F Al Bl		
root	color tones	mode/chord	root	color tones	mode/chord
F	b3, \$4, b7	min11	F	1, 63, 44	min 11
E	43, #4, 47	Lydian -	E	b2, \dagger{3}, #4	Altered
Eb	44, 5, 1	sus4, no7	Εb	42 , 44 , 45	add4
D	b5, b6, b2	Locrian	D	b3, #4, b6	Altered
Db	44, 46, 42	6/9	Db	43, 44, 46	Δ6
C	66, 67, 63	Aeolian	C	44, 66, 67	Aeolian
В	46, 47, 43	Ionian	В	# 4, \$ 6, \$ 7	Lydian
Bb	b7, 1, \d	Mixo sus4	ВЬ	4 4, Ь7, 1	Mixo sus4
Α	47, 62, 65	Locrian 47	Α	b6, 47, b2	Locrian 47
Ab	1, \$2, \$4	add 2	АЬ	46, 1, 42	6/9
G	b2, b3, b6	Phrygian	G	67, 62, 63	Phrygian
Gb	42, 43, 46	6/9	Gb	47, 42, 43	Ionian

It is suggested that the reader continue the process for all found structures – it is a tedious activity but may be worth the effort to understand the harmonic foundation of the source scale and to have a listing of all "workable" chords. Consult the appendix for additional information and examples of scale to chord derivations.

Example 3.9: Selected Chords - Three-Pitch Structures

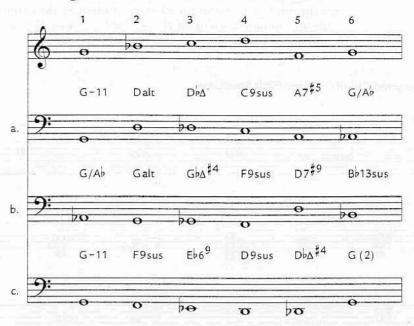


Example 3.10: Selected Chords - Two-Pitch Structures



Occasionally, one may want to have a new chord for every different pitch of the melody – usually to increase tension just prior to a cadence – this chord selection process is most dependent on a strong root melody. Note the use of contrary motion and counterpoint to the melody in the following bass melodies.

Example 3.11: Selected Chords - Single Pitch



The following guide is meant to assist in organizing the harmonization procedure, also refer to the harmonization process introduced on page 44. There are additional examples of single pitch harmonization in the appendix.

HARMONIZATION PROCEDURE

- 1. Identify:
 - (a) The parent source modality and chords of the pentatonic melody.
 - (b) The implied and secondary diatonic chords and modes.
 - (c) The trichords, structures and "grips" found in the melody.
- 2. Select Harmonic Rhythm:
 - (a) Linear 1 one diatonic mode or chord for entire melody.
 - (b) Linear 2 many chords and roots are diatonic to the melody.
 - (c) Linear 3 one non-diatonic mode/chord for the entire melody.
 - (d) Plateau many chords per melody, organized into symmetric groups: usually 2, 4 or 8 bars each.
 - (e) vertical fast, asymmetric, non-diatonic roots, from one melody pitch per chord, two melody pitches per chord, or one chord per trichord, use of repose and transition.
- 3. Create a Root/Bass Melody:
 - (a) Organize by melody-writing procedures given in chapter one.
 - (b) Try to use thirds intervals followed by fourths and fifths, then connect with chromatic filler pitches if needed.
 - (c) Plot cadential points, set directional contour.
- 4. Select the Chords:
 - (a) Select a "first chord" that sets the emotional goal of the composition.
 - (b) Select chords for the target cadential areas.
 - (c) Select the remaining chords to fulfill a modal contour.
- 5. Tweak:

Play through the project, noting any chord selection, bass melody or harmonic rhythm that offends your musical tastes, adjust and try again.

Note: There is a harmonization example found in the appendix, as well as in the following compositional analyses.

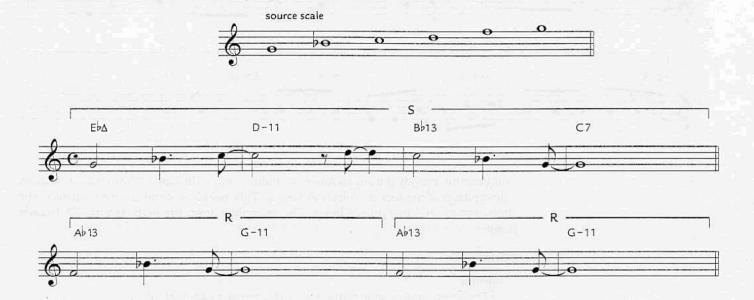
COMPOSITION EXAMPLES

The following examples represent a variety of styles that are available on recordings. Unfortunately, there are few recordings with examples that include compositions with an altered pentatonic source. In a way, this could be fortuitous as it presents a vacuum that could be filled by the forward-looking composer. The most representative recorded examples are from the Wayne Shorter CD *Etcetera* – the source scales on a number of the compositions are quite exotic – but not truly pentatonic.

The comments for the following will refer to the melodic source, motific and phrase organization, and harmonization. Only salient and pertinent points will be made, allowing the interested reader to delve deeper if desired.

EXTANT MELODIES

Example 3.12a: "Oriental Folk Song" (Traditional, Reharmonized by Wayne Shorter)



COMMENTS

Melody

- Based on a Chinese folk melody, the source scale is a common-practice G minor pentatonic.
- Most significant is the S/R organization S(s-r)/R/R, the often-found and accessible S/R formula.
- The motif is well balanced with the opening statement (s) in an upward direction, released by the reversal of direction with the response (r). The larger S/R is balanced by a contrast of fast melodic rhythm of the statement (S), and slow melodic rhythm of the two responses (R). Of importance is the clear outline of the tritonic (sus2) shapes found in ms. 1, 3, 5, and 7.

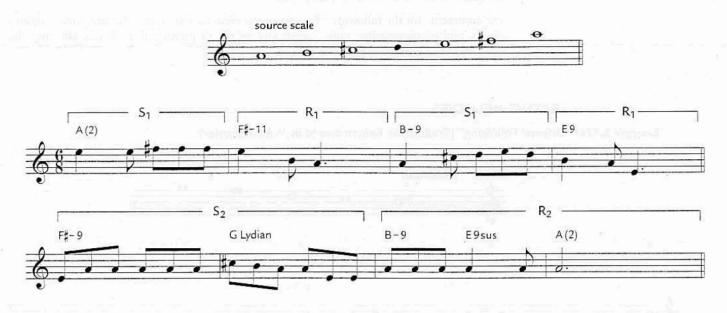
Harmony

- Without referring to a mode/chord listing, it is clear that most of the chords are diatonically related to the G minor source scale or its transposition a Bb major pentatonic.
- The harmonic rhythm is mostly symmetric, with a harmonization by two melody pitches, except where an increase of tension is desired for cadential definition.
- The Ab 13 is a tritone substituted dominant chord to the G minor tonic, with the A7 being an upper neighbor dominant to the Ab chord.

Other points

- As always, Wayne chooses to reharmonize by section, adding a few new chords to the second part, thereby enlarging the form beyond a mere repetition.
- The orchestration of this and all tunes found on the recording is very artistic and thoughtful – make note of how the two horns relate regarding unison, interval and octave assignments.

Example 3.12b: "Yaqui Indian Folk Melody" (Traditional)



This beautiful melody is from an American Indian source: the Pascua Yaqui tribe of Arizona - descendants of the ancient Toltecs of Mexico. This melody is found as a main theme in the "India Symphony" by Carlos Chávez. The example is from the Keith Jarrett CD *Treasure Island*.

COMMENTS

Melody

- •The source scale: major pentatonic with a passing add-pitch (d4).
- •The S/R is symmetrically organized.
- •Clear trichord shapes are found in ms. 2 and 4.

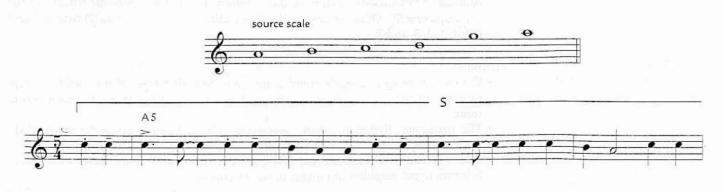
Harmonization

·Simple diatonic harmony is most affectively used.

Other points

•The consequence phrase (ms. 5-8), shows a nice balance by an increase of melodic rhythm.

Example 3.12c: "Gula Gula" by Mari Boine Persen





Although not mentioned on the CD, this melody has a quality that suggests an Indian influence - possibly Sami in origin.

COMMENTS

Melody

Like "Caribbean Fire Dance" introduced in Chapter I, this is a primitive but peaceful melody based on a tritonic tessitura. There is a sus2 structure outlined in the response portion (ms. 7-10). And most importantly, there is use of the S/R/R formula.

Harmonization

The main theme is very simple in its harmonic material, merely a tonic open fifth interval which goes to a G# open fifth as indicated on the musical example. There is additional harmonization in later melodic statements – a synopsis is also provided on the example.

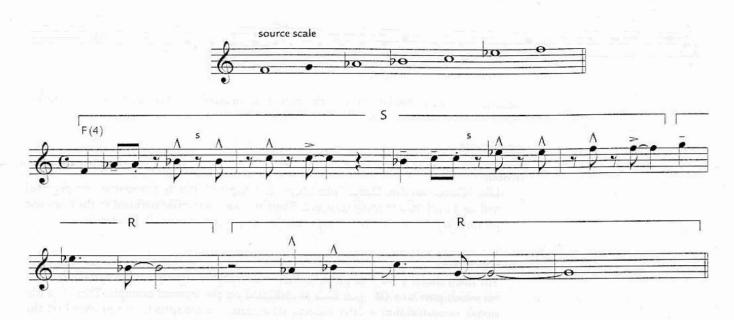
FOLK INFLUENCED COMPOSITIONS

Example 3.13a: "Badia" by Josef Zawinul



A section: A very simple statement and response - clear and folk-like. B section: An exotic balance, almost like an Eastern-European melody.

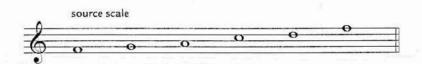
Example 3.13b: "Palm X" by Ron Miller



- A simple minor pentatonic the programmatic intention of the tune, if one has been there, is of the crazy experience of driving the palmetto expressway in Miami. Covertly Hispanic, hot and fervent, is the message!
- Of note is the recommended S/R/R organization, like example 3.12a.

MISCELLANEOUS PENTATONIC COMPOSITIONS

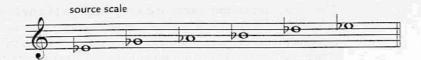
Example 3.14a: "Ponte de Ariea" by Milton Nasciemento





This beautiful melody is pentatonic, but because of its organization and shape, is not readily identifiable as such. Compare this melody to others of a Brazilian source. Are there similarities?

Example 3.14b: "Boogie Woogie Waltz" by Josef Zawinul





Main theme



Joe was with Miles at the time of this recording and Miles' influence shows: there is much use of space - a lot of transparency, but our interest is in the pentatonic quality.

The first material is of a simple diatonic source, in a clear exposition - the tritonic is evident, the direction is clear.

The main theme can almost be described as angular, but its rhythmic organization is almost hypnotic. The author includes this tune in his repertoire and can attest that one can play this theme over and over again without its losing its hypnotic effect – try it, you'll like it!

It should be pointed out, there are contrasting sections to balance the pentatonic melodies, but they are mostly in the form of harmonic, rhythmic and textural materials.

CONCLUSION OF CHAPTER III

The use of a pentatonic source or the organization of a melody based on a folk model is not new to the compositional process – most classical composers of note show the use of the aforementioned influences in addition to actually using extant material. An additional perk is that it is a means of establishing a nationalistic quality to composition.

To name a few examples:

Peter I. Tchaikovsky - the pentatonic theme in the 1st movement of the Symphony No. 6 (see p. 33).

Example 3.15a: A Prominent Theme From "The Firebird" by Igor Stravinsky



Example 3.15b: The "Shaker Hymn" from "Appalachian Spring" by Aaron Copland



Example 3.15c: "Scherzo No. 1 in B Minor" by Frederic Copin



Use of an extant Polish Christmas carol in the second movement.

The use of folk elements is what makes Bartòk sound Hungarian, Grieg sound Norwegian, Gershwin sound American, and Stravinsky sound Russian. The point is that the classical repertoire is a good source of study for the use of folk elements as well as the use of harmonic and melodic materials as suggested previously in Volume 1, and earlier chapters of this book.

RECORDINGS AND READINGS

Although there are not many jazz recordings with the kind of pentatonic compositions referred to in the text, there is an extensive number of both recordings and books that refer to the world's folk musics - only a few are listed - but it is easy to find more.

A. RECORDINGS

Native Dancer Wayne Shorter Columbia 46159 I Took Up The Runes ECM 21419 Jan Garbarek Night Dreamer Wayne Shorter BST 94173 Etcetera Wayne Shorter BST 214 BST 37644 Juju Wayne Shorter Tokyo Blues Horace Silver BNS 4134 Blackjack Donald Byrd BNS 84259 Search For The New Land Lee Morgan BST 84169 Weather Report Tail Spinnin' Col PC33417 8:30 Weather Report Col PC36060 A Love Supreme John Coltrane Impulse 133 Expansions McCoy Tyner BST 84338 Treasure Island Keith Jarrett Impulse/MCA 39106 Appalachian Spring Aaron Copland misc. recordings available China in Song and Dance National Folk Ensemble Bruno 50062 Authentic Music of the American Indian various Legacy 312 SM-11815 Whooo Boy! Justin Wilson India Symphony Carlos Chavez misc. recordings available

B. READINGS

Brazilian Music Workshop	Antonio Adolpho	Advance Music
Pentatonics	Jerry Bergonzi	Advance Music
Folk Music of China	Stephan Jones	Oxford University Press
Konkama Lapp District	Robert Pehrson	Norsk
The African Roots of Jazz	Kaufman & Guckin	Alfred Publishing
Merengue	Paul Austerlitz	Temple Press

CONCLUSION AND FINAL COMMENTS

Taken together, the materials presented in Volumes 1 and 2 should prove to be sufficient in establishing a serious regimen of study for the aspiring composer of any level of expertise. Once again, the importance of much listening, to all kinds of music, with deliberate attention, cannot be over stressed. In fact, if one's "ears" are good enough, and one has the time and desire, and pursues a stringent listening career, one really doesn't need these text books – but it would take years of very hard work to do it that way!

There may be much information in both volumes of the book – but there is more to cover yet. Further study would cover: more melody-writing procedures with the extension of pentatonic tunes to the study of blues tunes and avant-garde compositions; More in-depth study of tonal (II-V) harmony and form with the works of Horace Silver, Thelonious Monk, Charles Mingus and early Wayne Shorter. And more specifics regarding "movements" and style by looking at the compositions of "group" efforts like Weather Report, Return to Forever, Oregon and the ECM style, and other significant documented contributions – all possible subjects for a continuation of the book series to a Volume 3.

Ron Miller 1997

APPENDICES

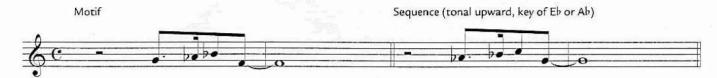
APPENDIX I

MOTIFIC DEVELOPMENT

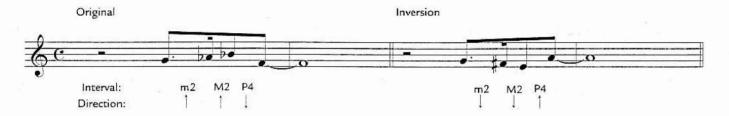
The following is included merely to provide an accessible source for review - it is assumed that the reader has been exposed to the techniques of motific development in previous readings or training. Essentially, a change in the original motif can be described by a difference in intervalic direction (up or down), ratio (semi-tone formula), or melodic rhythm (note duration).

Examples:

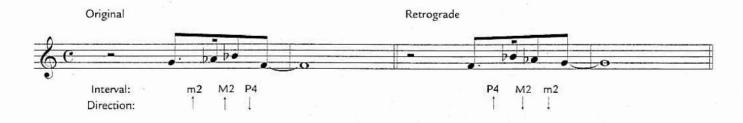
(a) Sequence - this seemingly simple device of repeating a motif starting from another pitch has proved effective for centuries. Usually, the interval structure of the sequenced motif is altered to fit scale and harmony.



(b) Inversion - the original semitone formula stays the same, but the directions are reversed: what went up now goes down, and what went down now goes up.



(c) Retrograde - both the direction and the intervalic formula are reversed.



(d) Retrograde Inversion - this is like a palindrome, the change reflects a "mirror-image" of the original, not merely a change in direction.



(e) Isorhythm - an important technique in jazz oriented melody writing, the developed motif shows a tie to the original by having the same note values (melodic rhythm), but with different pitches or direction.



(f) Isoarticulation - like the above, but the tie to the original in this case is by common articulations.



(g) Truncation - as the name implies, this shows a deletion of some of the pitches of the original motif, usually at the end of the motif, but not necessarily. Although other qualities of the original also can be changed, it is best to keep the original shape to clarify the musical development.

Example: "Ida Lupino" by Carla Bley



(h) Extension - the opposite of above, the developed motif is lengthened by additional melodic material. As long as a clear tie to the original is evident, other development techniques can be used as well.

Example: "Lost Illusions" by Ron Miller

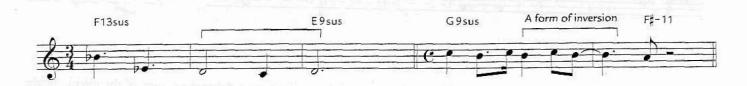


(i) Displacement - this refers to a shifting of the melodic rhythm relative to the harmonic rhythm; a shift of where the new motif occurs in the measure compared to the original.

Example: "Men in White" by Ron Miller from the CD Gliding



(j) Mutation - this term is used to describe any anomalous change shown in the new motif which still can be identified as being relative to the original.



There are many more descriptions of techniques for developing an original motif, but in the interest of clarity and simplicity, the above is sufficient. Keep in mind that when analyzing melodies, our interest is in identifying what the composer did to develop the melody musically, not in getting overly scientific or pedantic.

ARTICULATIONS AND EFFECTS

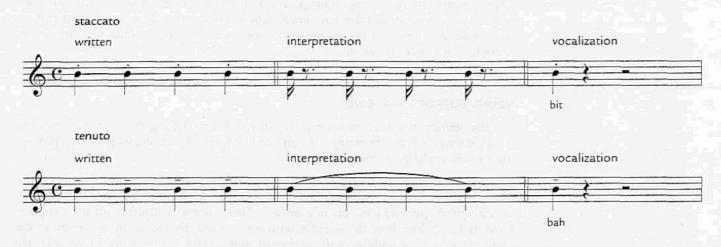
This subject is beyond the scope of this book - one really should refer to an orchestration or arranging text for this, but to provide a quick access and a review, the following descriptions of articulations are included.

ARTICULATIONS

It has been stated that for a jazz performance, only two articulations are needed: staccato and tenuto - there is no need to be so spartan.

To review:

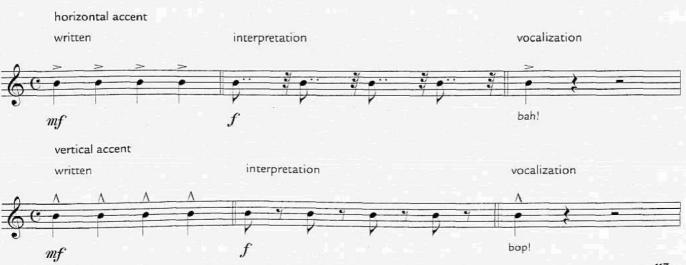
Staccato and tenuto refer to note length - how long the pitch is held - with no change in volume or emphasis.



Tenuto/staccato is a combined articulation found often in big band and hardbop tunes, it creates a very dramatic effect.



Accents direct the performer to emphasize or increase the volume of the selected pitch or pitches with a slight variation of pitch duration.



EFFECTS

Effects are idiomatic expressive devices peculiar to individual instrumental groups. Many are general to all instruments and voices. Again, beyond the scope of this book, keep their use in mind when composing a melody. Consult an orchestration book for an in-depth review. Know how to include them in your scores; some you should use include:

trills glissandos
tremolos slurs
scoops slaps
bends falls

There are many more, the important point is to keep them in mind while writing out your melody. It is recommended that you consult fellow performers to demonstrate all the effects that are possible on his or her instrument or voice – it may give you ideas for your melody if not for a whole composition.

SOUND SUPPORT PHRASING

The last performance directive to cover is quite important, and one that is often overlooked - that of sound support phrasing - the direction as when to start and when to stop producing a sound irrelative to pitch change.

Whether the sound is produced by blowing, plucking, scrapping or hitting, there is a point when the performer needs to take a breath, raise the arm, or move the bow to a starting position; all affect the phrase quality of a melody. There are two considerations the composer must make: (1) how long the sound production can last depending on the tempo of the performance and the abilities of the performer, and (2) how will the pause to take a breath or raise a bow affect the phrasing of the melody. Careful preplanning is required to assure a successful interpretation of your melody.

There are two ways to direct the performer of your melody regarding sound production:

Breath marks - a simple single quote (') specifies that the player is to take a breath, or
restart the sound production at that point. It has the effect of ending a phrase and
should be considered for use as a phrasing directive.

Example: Breath Mark Phrasing



COMMENT:

The placement of the breath mark has the effect of a slight pause between the consecutive quarter notes, creating a second phrase.

2. Sound support phrasing - these are phrase markings that are in addition to melodic phrasings - they are meant to direct sound production, but because of the pause that occurs when the performer takes a breath or in any way restarts a sound, the effect is that of melodic phrasing and/or punctuation, and has a similar effect as breath marks.

Example: Sound Support Phrasing



COMMENT:

The player, whether or not taking a breath, will restart the sound production, creating a new phrase.

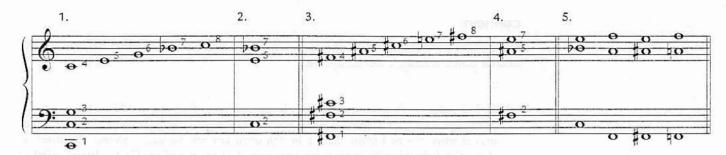
Be aware of all the aforementioned directive and melody interpretive devices in your listening sessions and take note of those that are particularly musically effective.

APPENDIX II

TRITONE SUBSTITUTION AND ACQUSTICS

Tritone substitution is a phenomenon that is a result of tempered tuning. Although it works for non-fixed tuned instruments, it is probably due to performance adjustments from years of playing with fixed pitch instruments. Looking at the overtone series, one can see that enharmonically spelled intervals should resolve differently. But with tempered tuning, the different spellings nonetheless sound the same.

Example:



- 1. The overtone series based on C with the partials numbered.
- 2. The 7th and 5th partials creating a tritone interval subtracting the 5 from 7 gives the difference tone, the tonic of the tritone.
- 3. & 4. The same procedure for the series based on F#, a tritone from C.
 - 5. The upper structure tritone intervals sound the same and as a sound, can resolve the in the same way producing the effect that the roots are substitutable.

STARTING CHORDS - STANDARDS

Tunes that start on:

A. I Major or III Minor	B. II Minor
Here's That Rainy Day The Girl From Impanema This Nearly Was Mine My Foolish Heart A Foggy Day You Stepped Out of a Dream	What a Difference a Day Mac Satin Doll Body and Soul Autumn in New York Its You or No One Prisoner of Love
C. M. M.	D. IV Major or Dominant
C. VI Minor	D. IV Major or Dominant
My Funny Valentine All The Things You Are Alone Together If I Should Lose You Lover Man	After You've Gone Just Friends Love For Sale How Insensitive
	<u> </u>
E. Non-Diatonic or Miscellaneou	5
Night and Day	PAI -
Lover	I dominant
I Cover the Waterfront	II dominant
Prelude to a Kiss	VI dominant

The reader is urged to fill the empty lines.

ADDITIONAL REHARMONIZATION - NEW MELODIES

Included for additional study or as a source of contemporary restyled standards to play over or to add to your repertoire.

A. A reharmonization of "I'm Getting Sentimental Over You" with a partial new melody, there is a return to the original melody at the second bar of the B section and the last three measures of the third ending – giving impetus to a partial new title.

Example: "Getting Semi-Mental" by Ron Miller



B. Only slightly reharmonized version of "Sweet Georgia Brown," but with a quirky and angular new melody. The tune is meant to be a "burner" – it fulfills its premise.



• 119 •

C. Another reharmonization and new melody of "Night and Day" - this time by David Liebman. Compare it to versions found in Chapter II.

Example: "Day and Nite" by David Liebman



D. A new-bop modal reharmonization of, and new melody for "What Is This Thing Called Love."

Example: "Love Thing" by Ron Miller



APPENDIX III

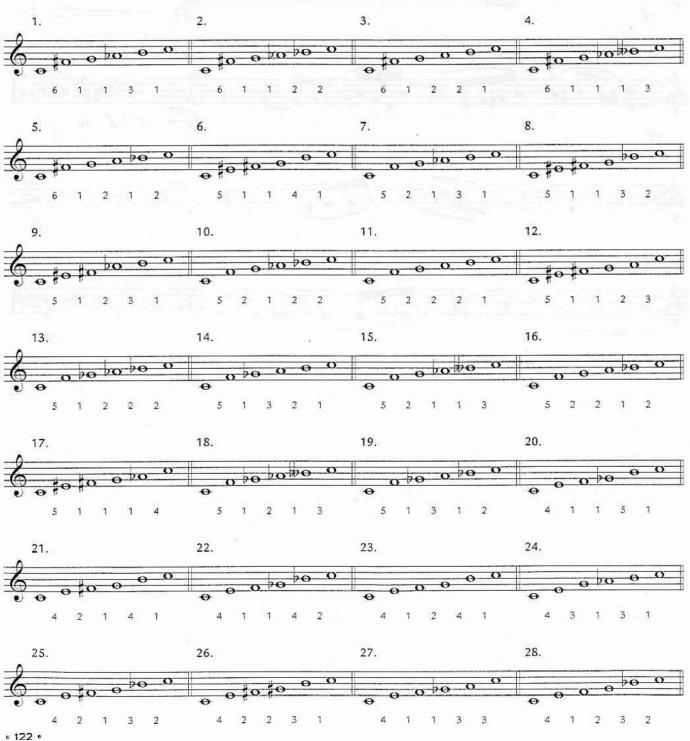
The following materials are included for further study, reference, and clarification.

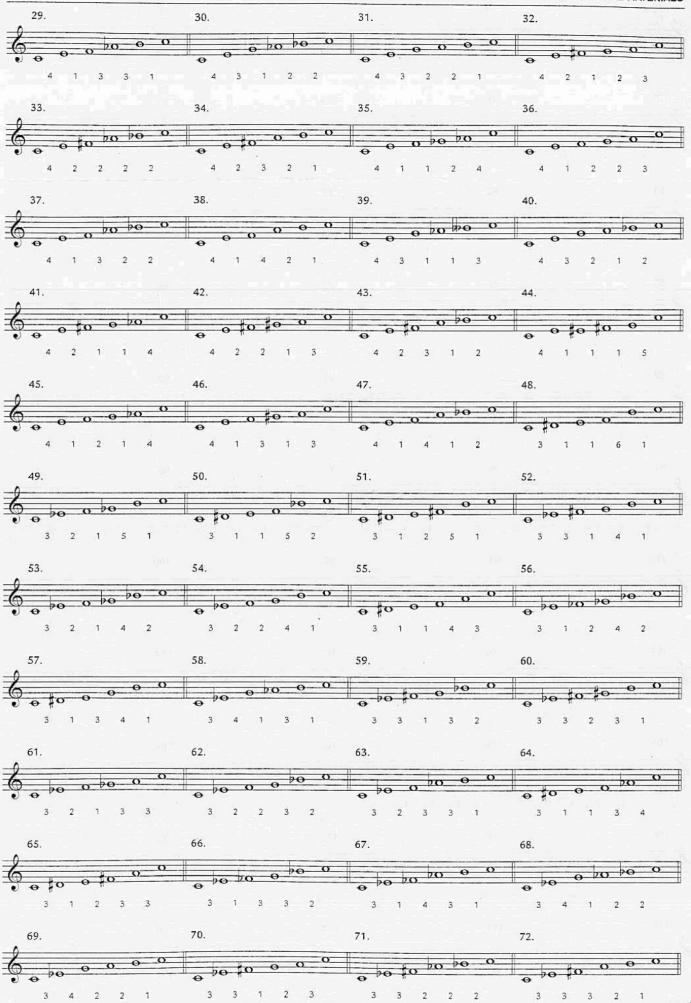
LIST OF ALL USABLE PENTATONIC SCALES

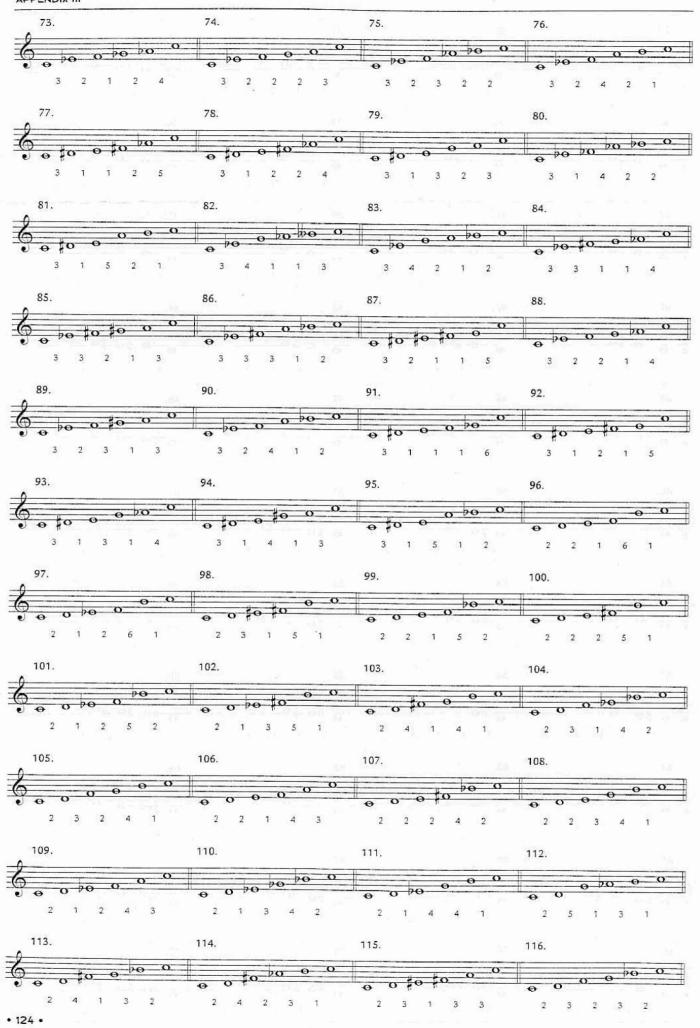
This listing was originally created by a computer program (included later) and spelled out in a more musical language here; the limits of the list are that there be no interval greater than a tritone. This is to attempt to limit the number of created scales that may have too many adjacent semitones – any modality within the scale would be too obscure, and the shape of the generated pentatonic would not be musical.

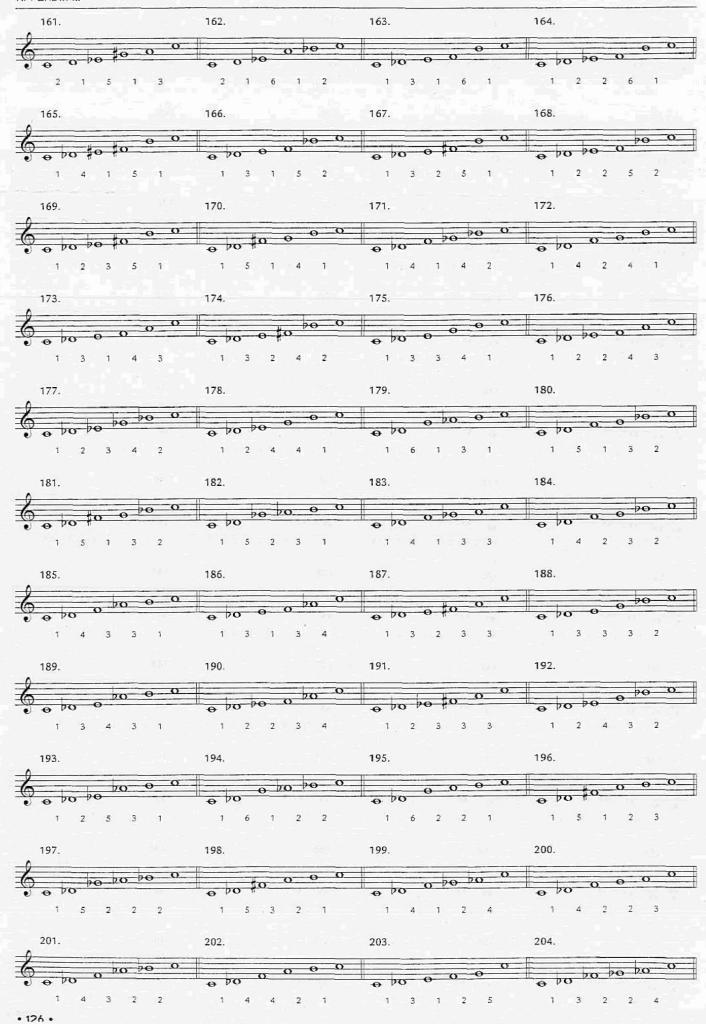
This listing is to be referred to as a source of altered pentatonics and to cross-check any pentatonics created by the combined method.

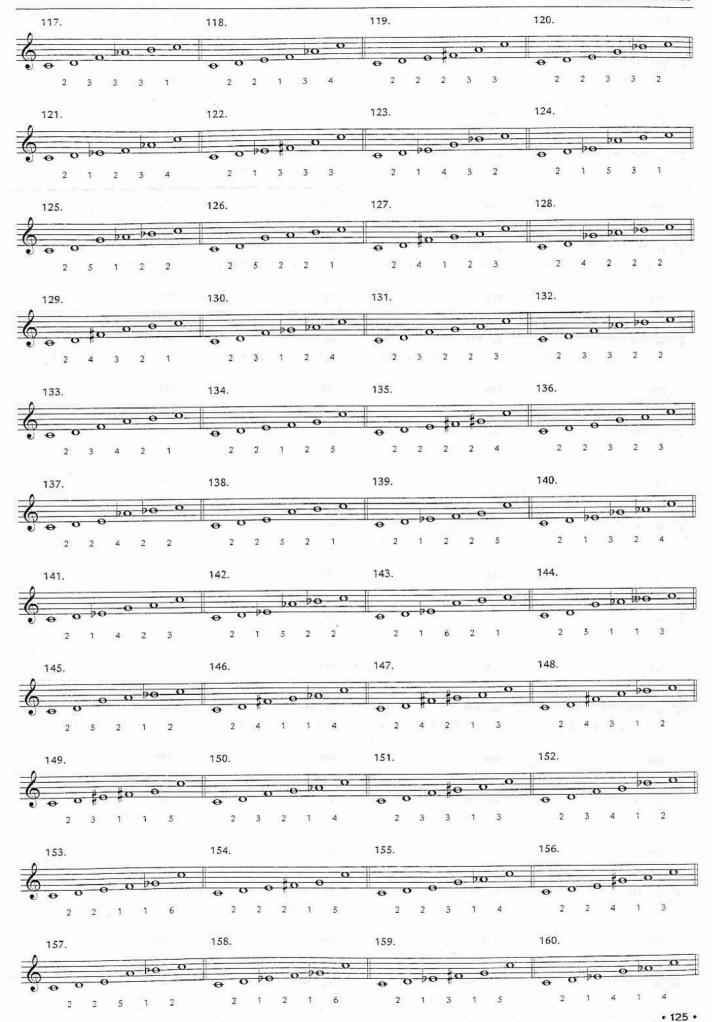
ALL PENTATONIC SCALES WITH NO INTERVAL LARGER THAN A TRITONE

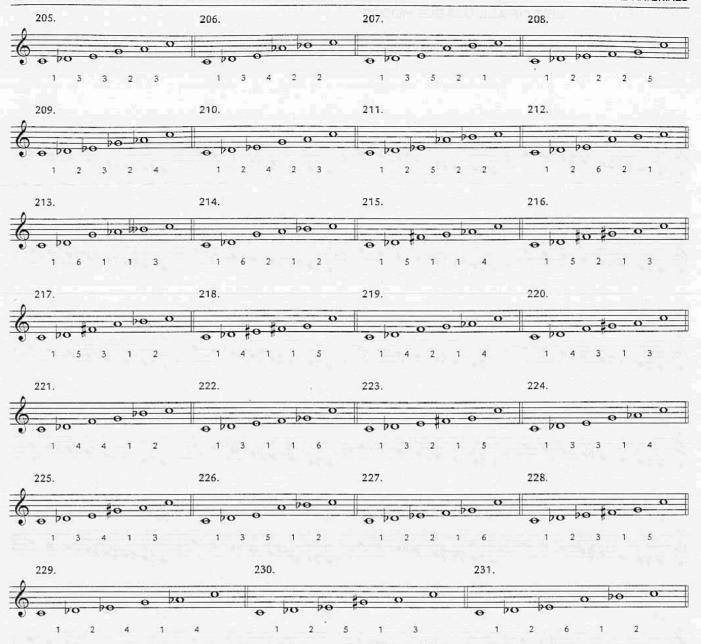






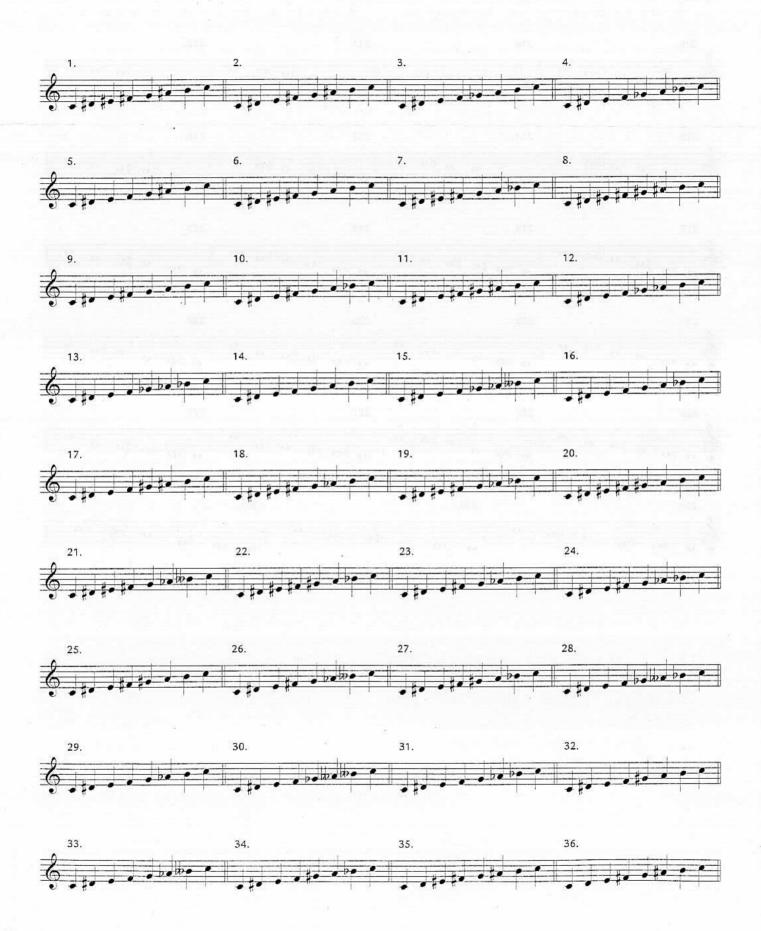


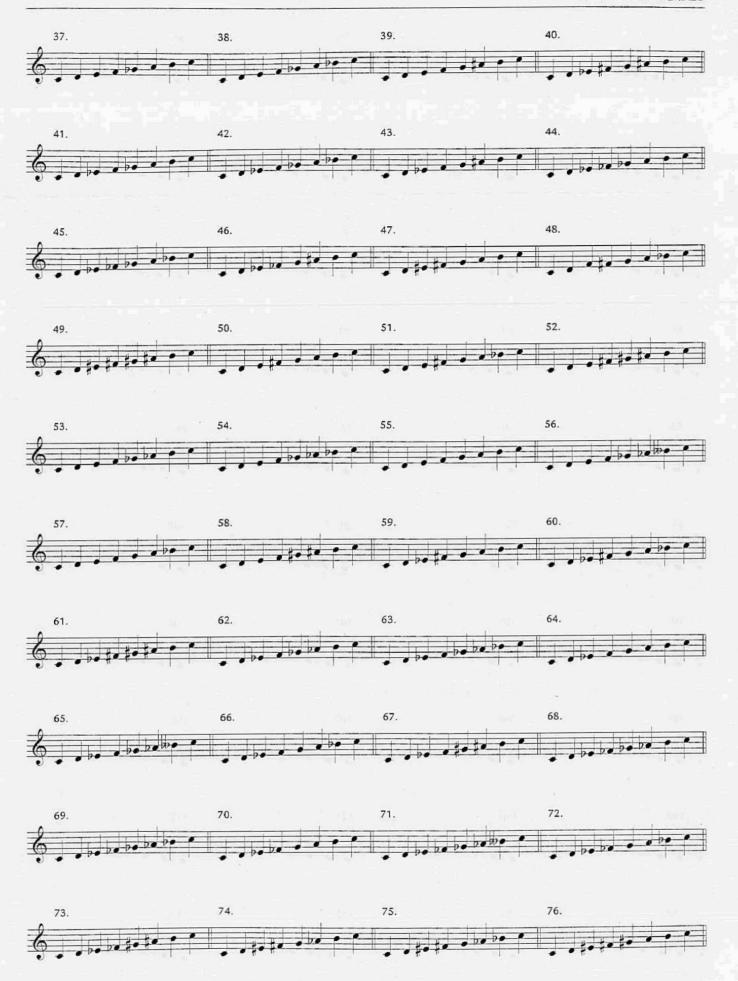


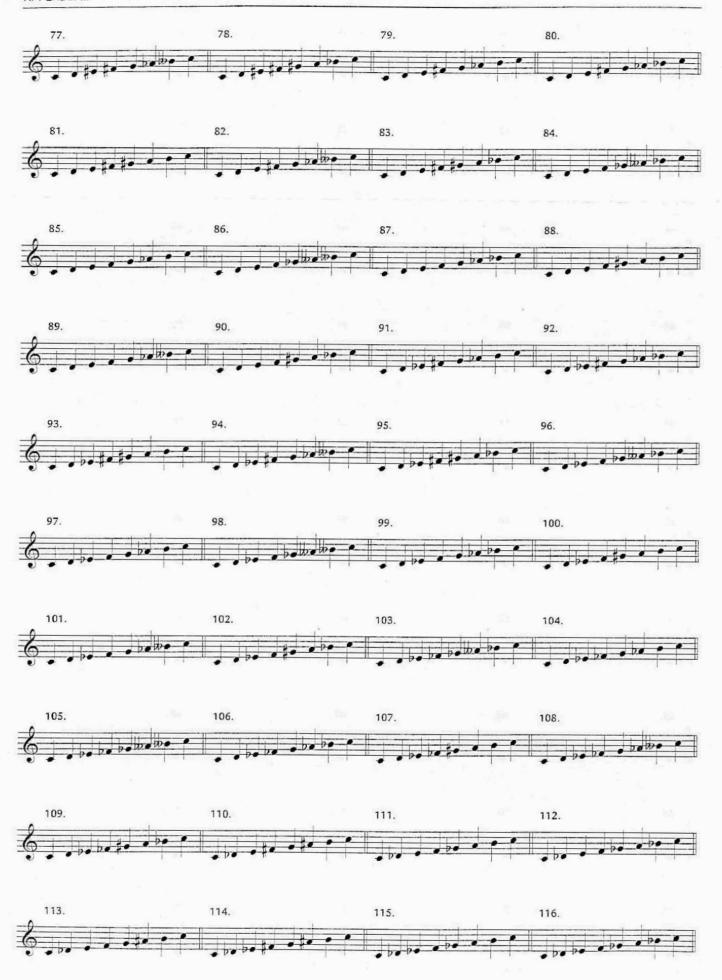


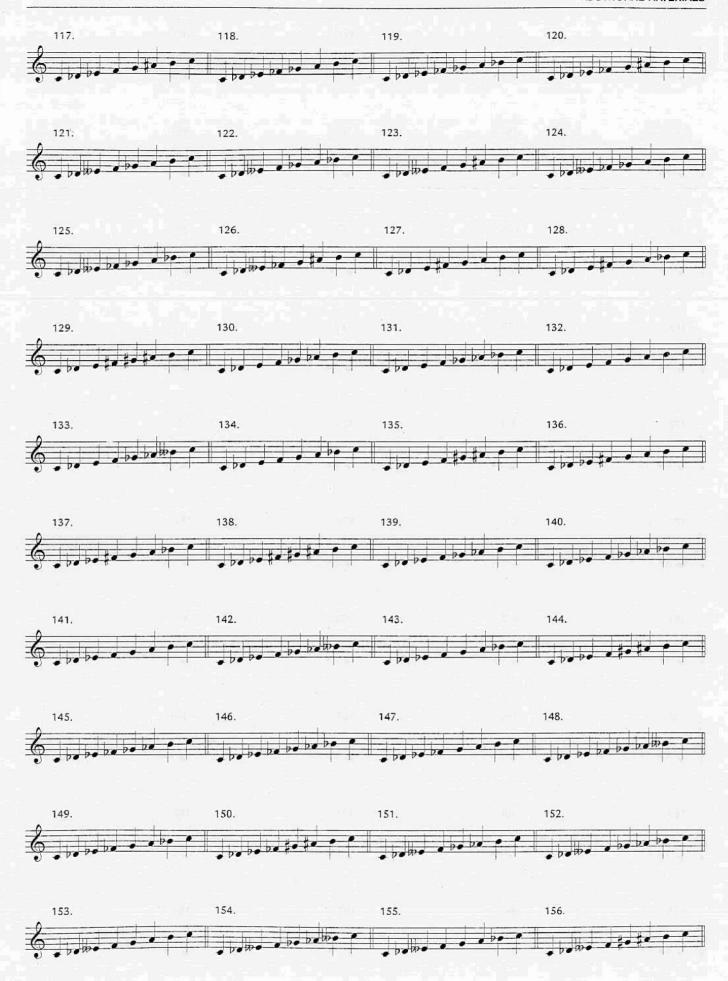
LIST OF ALL USABLE MODES

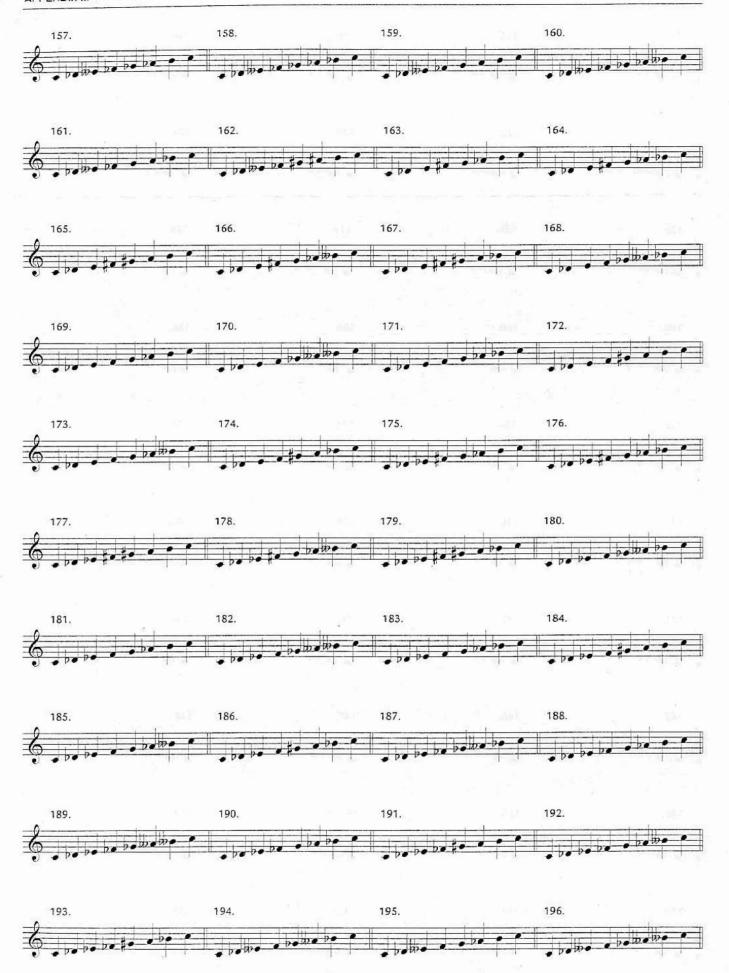
Included as a point of comparison for the pentatonic scales and as a source for creating pentatonics by the delete method, and as a general source of study for concepts of modality.

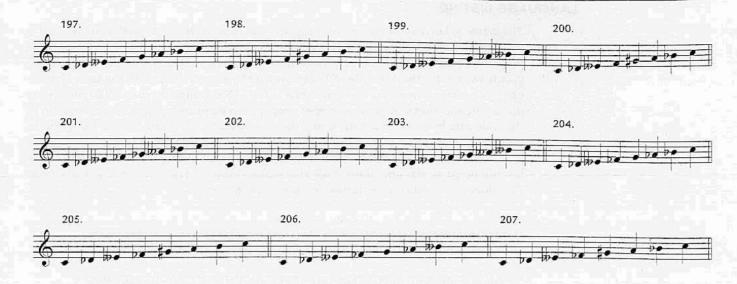












LANGUAGE LISTING

The actual C language listing of the program that created the list of usable modes, this is included for any programmers that may want to modify it to create other scale listings. The program is purposely inelegant to provide more portability to other platforms – this was originally written for the Atari 1040 ST (Motorola 68K) and compiled with the Laser C development package - the version presented here is fully ANSI compliant and should compile on just about any system. A more developed program would include graphic representation of the scale data by notes on a staff, saving the scales data or MIDI data to disc, being able to demonstrate any selected scales either by MIDI output or by monitor speaker, being able to print the graphic notes/staff screen and allowing user input of data to create all possible scales with no particular limitations – all with mouse, windows and menu interface of course. This does exist – contact the author for more information.

```
AN ALGORITHM TO CREATE ALL MODES WITH NO INTERVAL GREATER THAN
*** AN AUGMENTED SECOND BY THE TETRACHORD METHOD - R. Miller 1995 ***
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#define SIZE
               600
#define L
               3
#define W
               21
int total;
/* tetrachord data */
int array[L][W]=
   \{2,3,1,2,2,2,2,2,1,2,1,3,2,1,2,2,1,1,0,0,0\},\
   \{1,3,2,1,3,1,1,2,3,1,2,2,1,2,1,1,1,3,1,1,2\}
};
int mode[SIZE][10];
       *notes[8] = {"C","D","E","F","G","A","B","C" };
int value[8] = { 0, 2, 4, 5, 7, 9, 11, 12 };
void write_to_disk(void);
void main(void)
   int x, y, z, w, p, q, done, a, A,B,C,D,E,F,G,H, T=L*W;
   char key;
top: a=total=done=key=0;
   printf("\nselect screen info:\n hit 'd' to show data - \
       hit 'space' to compute only\n\n'n);
   while(!(key = getchar()));
   if(key == 0x20)
       printf("\n^- computing data \n^-\n^-);
   while(!done){
       for(y=0; y<L; y++){}
           for(z=0; z<L; z++){}
               for(x=0; x<W; x+=3){
                   for(w=0; w<W; w+=3){
                       /* getting the sum of tetrachords */
                       if(array[z][w]){
                           p=array[y][x] + array[y][x+1] + array[y][x+2];
```

```
q=array[z][w] + array[z][w+1] + array[z][w+2];
                         else
                             p=q=0;
                         /* if sum of tetrachords<12 */
                         if((p) && (q) && ((p+q)<12)){
                             A=mode[total][0]=0;
                             B=mode[total][1]=array[y][x];
                             C=mode[total][2]=array[y][x+1];
                             D=mode[total][3]=array[y][x+2];
                             F=mode[total][5]=array[z][w];
                             G=mode[total][6]=array[z][w+1];
                             H=mode[total][7]=array[z][w+2];
                             E=mode[total][4]=12-(A+B+C+D+F+G+H);
                             /* screen display */
                             if(key == 'd'){
                                 printf(" [%3d] ",total+1);
                                 printf("%2d",B);
                                 printf("%2d",C);
                                 printf("%2d",D);
                                 printf("[%2d]",H);
                                 printf("%2d",E);
                                 printf("%2d",F);
                                 printf("%2d \n",G);
                                 } /* key == 13 */
                             ++total;
                         if(a>T && (B==3 && C==2 && D==1))
                             done = true;/* test for 1st tetrachord */
                        } /* end p+q<12.. */
                    ++a;/* increment main counter */
                    if(key == 0x20 && a % 120 == 0)
                        printf("\ncycles completed: %3d",a);
                    if(a > SIZE)
                        -done = 1;
                    } /* end for(w.*/
                } /* end for(x.*/
            } /* end for(z.*/
       } /* end for y.*/
printf("\n\n\n All Done! Total Scales Created: %3d\n\n",total);
printf("\n- hit 's' to save output to disk and quit, 'd' to do again, \
        'q' to quit -\n");
while(!(key = getchar()));;
switch(key){
   case 's':
       printf("\n\n" saving data as 'scales.txt' in the default directory\n\
                    existing files will be overwritten!\n\n");
       write_to_disk();
       exit(1):
       break:
       goto top;
       break;
   case 'q':
```

```
exit(1);
        break:
    default:
        break:
    /* end of main */
void write_to_disk(void)
    int x,y,z, A,B=0,C,D,E;
    char prbuf[34];
    FILE *thefile;
    thefile = fopen("scales.txt", "w");
    if(thefile != NULL){
        for(y=0;y<total;y++){
             if(y > total)
                 break; /* if cycle over or abort desired */
             D=0;
             if(mode[y][2] && y < SIZE){
                 fprintf(thefile," %3d : C ",(y+1));
                 for(x=1; x<8; x++){ /* convert numeric data to alpha */
                     E=value[x];
                   C=mode[y][x];
                   D += C;
                   if(D > 12) D=12;
                     fprintf(thefile,"%s",notes[x]);
                     if(E < D){
                                /* check for enharmonics */
                          if((D-E)==2) fprintf(thefile, "%s", "## ");
                                       fprintf(thefile,"%s","# ");
                      if(E>D){
                          if((E-D)==2) fprintf(thefile,"%s","bb ");
                                       fprintf(thefile,"%s","b");
                     if(E==D)
                          fprintf(thefile,"%s"," ");
                     } /* end of for(x....*/
                 } /* end of if(mode...*/
            fprintf(thefile,"\n");/* new line*/
            } /* end of for(y<total ...*/
        fclose(thefile);
        puts("file successfully written\n");
        } /* end of if(fopen...)*/
        printf("\ncould not open file - press key...");
        getchar();
}/* end of write_to_disk */
```

MISCELLANEOUS MATERIALS

 Computer generated harmonizations of altered pentatonic scales, one chord per each scale pitch.



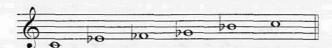
2. Another example of harmonizing a pentatonic melody.





3. Examples of pentatonics created by the alteration method.

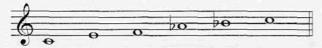
a) #56: b4, b5 - Altered (Modes of: Db Mel Minor)



b) #113: #4, h7 - Mixo#4, Dorian#4 (Modes of: G Mel Minor, G Harm Minor)



c) #37: b6, b7 - Mixob6 Phrygiant3 (Modes of: F Mel Minor/Harm Minor)



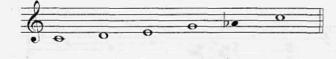
d) #79: Major Blues



e) #141: Dorian



f) #155: Ionian 66



g) #224: Phrygian 43



h) Ionian #5



i) Ionian #2, 66



j) Aeolian



k) Altered



4. Piano score of "Palm X" for extra study and performance use.



ABOUT THE AUTHOR

Ron Miller, Professor (Studio Music and Jazz), received a B.F.A, degree from Florida Atlantic University and a M.M. degree from the University of Miami. His compositions have been performed worldwide, including the Jamey Aebersold Camps, and have been recorded and/or performed by notables the likes of Red Rodney, Hal Galper, Joe Lovano, Billy Hart, Kenny Werner, Ira Sullivan, Stan Getz, Mark Egan and Danny Gottlieb of Elements.

Ron's composition students have included, among others, Pat Metheny, Bobby Watson, "T" Lavitz, Bruce Hornsby, Mark Egan, Jon Secada and Gil Goldstein. He has given jazz piano performances with Ira Sullivan, Allen Eager, Rick Margitza, Mark Egan, and Pat Metheny, and has backed up many show business personalities as well.

Many of his students, under his direction, have been granted the prestigious Down Beat award either as individuals or in a group effort. The Best Small Ensemble award went to the Fusion Ensemble in 1979, Priority in 1988, and the Monk/Mingus Ensemble in 1997. Individual awards of Best Soloist went to Reed Arvin in 1979, and Rick Margitza in 1984. Of the Down Beat Outstanding Performance awards, the Avant-Garde ensemble won in 1980, 1981 and 1982, the Fusion Ensemble won in 1981 and 1982, and the Monk/Mingus Ensemble received the award in 1984.

Ron's compositions can be found on the following recordings: Brooklyn Blues, Danny Gottlieb; Freedom Tower, Mike Orta; Dialogs, Hal Galper; Seventh Sign, the UM Concert Jazz Band; Liberal Arts, Elements; Blues for the Old New Age, Gary Keller; Lonely in a Crowd, Barry Ries; and Gliding, Stan Samole with Elements.

In addition to teaching jazz composition, advanced improvisation, and jazz piano, Miller directs the Monk/Mingus ensemble, the Avant-Garde ensemble, and the Horace Silver ensemble.

Ron can be reached at rmiller0@bellsouth.net.



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